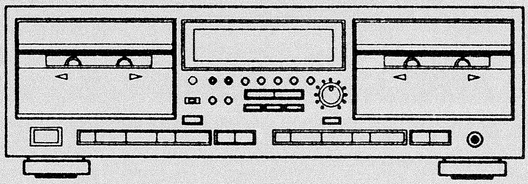
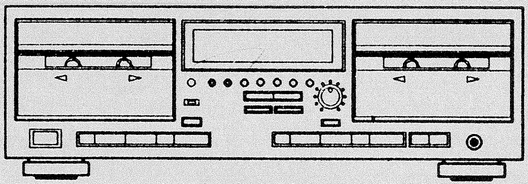
aiwa

AD-WX929
AD-WX828



AD-WX929



AD-WX828

STEREO CASSETTE DECK

SERVICE MANUAL

- BASIC TAPE MECHANISM : α – 14MK II
- TYPE. HE,E,K

SPECIFICATIONS

Type	Stereo cassette tape deck
Track format	4 tracks, 2 channels
Power requirements	AD-WX929HE/AD-WX828HE AC 120/220/240V switchable, 50/60Hz AD-WX929E/AD-WX828E AC 230V, 50Hz AD-WX929K/AD-WX828K AC 240V, 50Hz
Power consumption	23 W
Frequency response	Metal tape: 20 – 18,000Hz $^{0}_{-10}$dB (–20dB Recording) CrO_2 tape: 20 – 17,000Hz $^{0}_{-10}$dB (–20dB Recording) Normal tape: 20 – 16,000Hz $^{0}_{-10}$dB (–20dB Recording)
Signal-to-noise ratio	78 dB (Dolby C NR ON above 5 kHz, metal tape, peak level)
Wow and flutter	AD-WX929:0.060 % (WRMS) AD-WX828:0.065 % (WRMS)
Recording system	AC bias
Erasure system	AC erase
Motor	DC motor × 2
Playback/recording head	Permalloy head
Erasure head	Double gap Ferrite head
Input	REC/LINE IN: 50mV (input impedance 47 kΩ, 0 VU)*
Output	PLAY/LINE OUT: 350 mV (0 VU)* Optimum load impedance 47 kΩ or more PHONES: 0.8 mW (load impedance 32 Ω, 0 VU)*
Outer dimensions	(W × H × D) AD-WX929: 430 × 140 × 317.5 mm AD-WX828: 430 × 140 × 317.5 mm
Weight	AD-WX929: 5.7 kg AD-WX828: 5.4 kg

- Design and specifications are subject to change without notice.
- Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.
- "DOLBY", the double-D symbol ▯▯ and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

S/M Code No. 0184 DATE OF ISSUE 2/1993-I

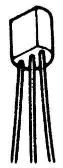
CAUTION WHEN SERVICING

If the tape transport mechanisms are in the following state, an abnormal sound may be heard when the power switch is turned on and the mechanisms may not operate. In this case, turn the power switch off and then on again. The mechanisms will operate normally.(The microprocessor will be reset.)

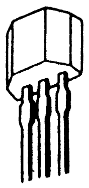
Case :The PLAY solenoids in both decks 1 and decks 2 have drifted down from the normal positions and also the FR solenoid in one deck has drifted down from the normal position.

Case :The FR solenoids in both decks 1 and decks 2 have drifted down from the normal positions and also the PLAY solenoid in one deck has drifted down from the normal position.

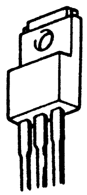
TRANSISTOR ILLUSTRATION



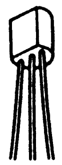
2SK373



DTA143
DTC114
DTC144



2SB1330
2SB1370



2SA933
2SA952
2SA1296
2SC945
2SC1740
2SC1815
2SC2001
2SC2240
2SD655

■ ACCESSORIES／PACKAGE LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
	1	★82-DW1-904-019	IB,EK (S)	※	1
	2	★82-DW1-030-019	RC-W101 (AD-WX929)	※	1
	3	★87-034-786-019	CORD PIN 189-0760		1
	4	★87-042-062-019	PLUG ADPTR S-I6115		1

ELECTRICAL MAIN PARTS LIST – 1 (AD – WX929)

=== IC ===

REF. NO.	PART NO.	DESCRIPTION
	87-001-441-019	IC, BA10358N
	87-002-282-019	IC, BU4066B
	87-002-444-019	IC, BU4094B
	87-002-669-010	IC, GP1U571X(REMOTE SENSOR)
	87-002-932-010	IC, HA12155NT-01
	87-001-334-019	IC, LB9051A
	82-DW1-630-010	IC, LC866016A-5300
	87-002-328-010	IC, M5218AL
	87-020-758-019	IC, NJM2068SD
	87-027-565-019	IC, TC4081BP

=== TRANSISTOR ===

REF. NO.	PART NO.	DESCRIPTION
	89-503-735-089	TR, FET 2SK373-GR (TPE2)
	87-026-463-089	TR, 2SA933S (RS)
	89-109-521-089	TR, 2SA952K
	89-112-965-089	TR, 2SA1296GR
	89-213-302-089	TR, 2SB1330Q
	89-213-702-019	TR, 2SB1370E
	89-309-456-089	TR, 2SC945L P
	87-026-462-089	TR, 2SC1740S (RS)
	89-318-155-089	TR, 2SC1815GR
	89-320-011-089	TR, 2SC2001K
	89-322-406-089	TR, 2SC2240BL
	89-406-555-089	TR, 2SD655E
	87-026-288-089	TR, DTA143XS
	87-026-464-089	TR, DTC114TS
	87-026-215-089	TR, DTC114YS
	87-026-218-089	TR, DTC144ES

=== DIODE ===

REF. NO.	PART NO.	DESCRIPTION
	87-001-783-089	DIODE, 1N4002-T
	87-001-559-089	DIODE, 1SS131 (T-72)
	87-020-465-089	DIODE, 1SS133 T-72
	87-020-123-089	DIODE, DS446-AT (TA)
	87-017-183-089	ZENER, HZS12A3L
	87-017-143-089	ZENER, HZS22-2
	87-001-636-089	ZENER, HZS3C1
	87-017-101-089	ZENER, HZS6C2
	87-001-936-089	ZENER, HZS7A3L
	87-001-911-089	ZENER, UTZJ4.7A (TAPG)

=== MAIN CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
C101	★87-018-121-089	CAP, TC-U 150P-50 B
C102	★87-018-121-089	CAP, TC-U 150P-50 B
C103	★87-018-123-089	CAP, TC-U 220P-50 B
C104	★87-018-123-089	CAP, TC-U 220P-50 B
C109	★87-010-405-089	CAP, E 10-50 SME
C110	★87-010-405-089	CAP, E 10-50 SME
C111	★87-010-405-089	CAP, E 10-50 SME
C112	★87-010-405-089	CAP, E 10-50 SME
C113	★87-018-203-089	CAP, TC-U 8200P-16 Y
C114	★87-018-133-089	CAP, TC-U 4700P-16 X
C115	★87-018-133-089	CAP, TC-U 4700P-16 X
C116	★87-018-203-089	CAP, TC-U 8200P-16 Y
C121	★87-010-384-089	CAP, E 100-25 SME
C122	★87-018-134-089	CAP, TC-U 0.01-16 Y
C124	★87-018-134-089	CAP, TC-U 0.01-16 Y
C125	★87-018-126-089	CAP, TC-U 390P-50 B
C126	★87-018-126-089	CAP, TC-U 390P-50 B
C201	★87-018-121-089	CAP, TC-U 150P-50 B
C202	★87-018-121-089	CAP, TC-U 150P-50 B
C203	★87-018-124-089	CAP, TC-U 270P-50 B
C204	★87-018-124-089	CAP, TC-U 270P-50 B
C209	★87-018-133-089	CAP, TC-U 4700P-16 X
C210	★87-018-133-089	CAP, TC-U 4700P-16 X
C211	★87-018-203-089	CAP, TC-U 8200P-16 Y
C212	★87-018-203-089	CAP, TC-U 8200P-16 Y
C213	★87-010-405-089	CAP, E 10-50 SME
C214	★87-010-405-089	CAP, E 10-50 SME
C215	★87-010-405-089	CAP, E 10-50 SME
C216	★87-010-405-089	CAP, E 10-50 SME
C217	★87-010-384-089	CAP, E 100-25 SME
C218	★87-018-134-089	CAP, TC-U 0.01-16 Y
C220	★87-018-134-089	CAP, TC-U 0.01-16 Y
C221	★87-018-126-089	CAP, TC-U 390P-50 B
C222	★87-018-126-089	CAP, TC-U 390P-50 B
C301	★87-018-123-089	CAP, TC-U 220P-50 B
C302	★87-018-123-089	CAP, TC-U 220P-50 B
C303	★87-018-131-089	CAP, TC-U 1000P-50 B
C304	★87-018-131-089	CAP, TC-U 1000P-50 B
C309	★87-018-126-089	CAP, TC-U 390P-50 B
C310	★87-018-126-089	CAP, TC-U 390P-50 B
C313	★87-018-131-089	CAP, TC-U 1000P-50 B
C314	★87-018-131-089	CAP, TC-U 1000P-50 B
C317	★87-010-263-089	CAP, E 100-10
C318	★87-010-260-089	CAP, E 47-25 SME
C319	★87-018-131-089	CAP, TC-U 1000P-50 B
C320	★87-014-081-089	PPCAP 0.01J
C323	★87-018-201-089	CAP, TC-U 5600P-16 X
C325	★87-010-248-089	CAP, E 220-10 SME
C326	★87-010-401-089	CAP, E 1-50 SME
C327	★87-010-401-089	CAP, E 1-50 SME
C329	★87-010-405-089	CAP, E 10-50 SME
C401	★87-018-123-089	CAP, TC-U 220P-50 B
C402	★87-018-123-089	CAP, TC-U 220P-50 B
C403	★87-018-131-089	CAP, TC-U 1000P-50 B
C404	★87-018-131-089	CAP, TC-U 1000P-50 B
C409	★87-018-126-089	CAP, TC-U 390P-50 B
C410	★87-018-126-089	CAP, TC-U 390P-50 B
C413	★87-018-131-089	CAP, TC-U 1000P-50 B
C414	★87-018-131-089	CAP, TC-U 1000P-50 B
C417	★87-018-131-089	CAP, TC-U 1000P-50 B
C418	★87-014-081-089	PPCAP 0.01J
C421	★87-018-201-089	CAP, TC-U 5600P-16 X
C423	★87-010-248-089	CAP, E 220-10 SME
C424	★87-010-401-089	CAP, E 1-50 SME
C425	★87-010-401-089	CAP, E 1-50 SME
C427	★87-010-405-089	CAP, E 10-50 SME
C501	★87-010-404-089	CAP, E 4.7-50 SME
C502	★87-010-404-089	CAP, E 4.7-50 SME
C503	★87-018-121-089	CAP, TC-U 150P-50 B
C504	★87-018-121-089	CAP, TC-U 150P-50 B
C505	★87-018-132-089	CAP, TC-U 2200P-16 X
C506	★87-018-132-089	CAP, TC-U 2200P-16 X
C521	★87-018-131-089	CAP, TC-U 1000P-50 B
C522	★87-018-131-089	CAP, TC-U 1000P-50 B
C524	★87-010-405-089	CAP, E 10-50 SME
C601	★87-018-121-089	CAP, TC-U 150P-50 B
C602	★87-018-121-089	CAP, TC-U 150P-50 B
C603	★87-010-404-089	CAP, E 4.7-50 SME
C604	★87-010-404-089	CAP, E 4.7-50 SME
C605	★87-010-546-089	CAP, E 0.33-50 SME
C606	★87-010-546-089	CAP, E 0.33-50 SME
C607	★87-010-402-089	CAP, E 2.2-50 SME
C608	★87-010-402-089	CAP, E 2.2-50 SME
C609	★87-010-401-089	CAP, E 1-50 SME
C610	★87-010-401-089	CAP, E 1-50 SME
C611	★87-018-132-089	CAP, TC-U 2200P-16 X
C612	★87-018-132-089	CAP, TC-U 2200P-16 X
C613	★87-018-121-089	CAP, TC-U 150P-50 B
C614	★87-018-121-089	CAP, TC-U 150P-50 B
C615	★87-010-404-089	CAP, E 4.7-50 SME
C616	★87-010-404-089	CAP, E 4.7-50 SME
C627	★87-010-404-089	CAP, E 4.7-50 SME
C628	★87-010-404-089	CAP, E 4.7-50 SME
C629	★87-010-404-089	CAP, E 4.7-50 SME
C630	★87-010-404-089	CAP, E 4.7-50 SME
C631	★87-010-401-089	CAP, E 1-50 SME
C632	★87-010-401-089	CAP, E 1-50 SME
C633	★87-010-405-089	CAP, E 10-50 SME
C634	★87-010-401-089	CAP, E 1-50 SME
C636	★87-018-119-089	CAP, TC-U 100P-50 B
C638	★87-018-195-089	CAP, TC-U 1200P-16 X
C643	★87-010-405-089	CAP, E 10-50 SME
C644	★87-010-221-089	CAP, E 470-10 SME
C645	★87-010-401-089	CAP, E 1-50 SME
C646	★87-010-263-089	CAP, E 100-10
C647	★87-010-401-089	CAP, E 1-50 SME
C648	★87-018-121-089	CAP, TC-U 150P-50 B
C649	★87-018-121-089	CAP, TC-U 150P-50 B
C650	★87-018-121-089	CAP, TC-U 150P-50 B
C651	★87-010-401-089	CAP, E 1-50 SME
C652	★87-010-405-089	CAP, E 10-50 SME
C654	★87-018-134-089	CAP, TC-U 0.01-16 Y
C667	★87-018-206-089	CAP, TC-U 8200P-16 Y
C668	★87-018-206-089	CAP, TC-U 8200P-16 Y
C771	★87-010-401-089	CAP, E 1-50 SME
C772	★87-010-401-089	CAP, E 1-50 SME
C773	★87-010-263-089	CAP, E 100-10
C774	★87-010-263-089	CAP, E 100-10
C775	★87-010-401-089	CAP, E 1-50 SME
C776	★87-010-401-089	CAP, E 1-50 SME
C778	★87-018-134-089	CAP, TC-U 0.01-16 Y
C779	★87-010-401-089	CAP, E 1-50 SME
C780	★87-010-401-089	CAP, E 1-50 SME
△C801	★87-010-453-099	CAP ELECT 4700-25V SME
△C802	★87-010-389-099	CAP ELECT 2200-25V SME
C803	★87-010-247-089	CAP, E 100-50 SME
C804	★87-010-405-089	CAP, E 10-50 SME
C805	★87-010-382-089	CAP, E 220-25 SME
C806	★87-010-235-089	CAP, ELECT 470-16V
C807	★87-010-401-089	CAP, E 1-50 SME
C808	★87-010-387-089	CAP, ELECT 470-25V
C809	★87-010-221-089	CAP, E 470-10 SME
△C810	★87-019-112-019	CAP, SG 0.01 E
C851	★87-010-405-089	CAP, E 10-50 SME
C852	★87-010-221-089	CAP, E 470-10 SME
C853	★87-010-406-089	CAP, E 22-50 SME
C854	★87-010-406-089	CAP, E 22-50 SME
C855	★87-018-134-089	CAP, TC-U 0.01-16 Y
△F801	87-035-367-019	FUSE, 3.15A 250V TE(E, K)
△F801	87-035-191-019	FUSE, 3315AT(HE)
J772	★87-009-394-019	JACK PIN 4P EARTH(LINE IN/OUT)
L301	★80-DS4-618-010	COIL HX85K-4
L302	★80-DS4-618-010	COIL HX85K-4
L303	★80-DS4-617-010	COIL OSC 85K-4
L401	★80-DS4-618-010	COIL HX85K-4
L402	★80-DS4-618-010	COIL HX85K-4
L403	★80-DS4-617-010	COIL OSC 85K-4
L501	★82-231-622-080	COIL, 22MH-J
L502	★82-231-622-080	COIL, 22MH-J
L503	★87-003-131-089	COIL, 10MH J
L504	★87-003-131-089	COIL, 10MH J
L601	★80-DS2-611-019	FLTR, MPX 85K-CAN
L602	★80-DS2-611-019	FLTR, MPX 85K-CAN
L603	★82-231-622-080	COIL, 22MH-J
L604	★82-231-622-080	COIL, 22MH-J
△S801	★87-036-015-019	AC SW SDDLDI(POWER)
△S802	87-036-136-019	SW ROTARY 1-1-3 H BI(AC VOLTAGE)
SFR101	★87-024-168-089	SFR, 1K DIA6 V
SFR102	★87-024-168-089	SFR, 1K DIA6 V
SFR201	★87-024-168-089	SFR, 1K DIA6 V
SFR202	★87-024-168-089	SFR, 1K DIA6 V
SFR301	★87-024-176-089	SFR, 100K DIA6 V
SFR302	★87-024-176-089	SFR, 100K DIA6 V
SFR401	★87-024-176-089	SFR, 100K DIA6 V
SFR402	★87-024-176-089	SFR, 100K DIA6 V
SFR501	★87-024-172-089	SFR, 10K DIA6 V
SFR502	★87-024-172-089	SFR, 10K DIA6 V
SFR601	★87-024-175-089	SFR, 47K DIA6 V
SFR602	★87-024-175-089	SFR, 47K DIA6 V

=== FRONT CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
S902	87-036-170-089	SW, TACT(STOP)(D1)
S903	87-036-170-089	SW, TACT(STOP)(D2)
S904	87-036-170-089	SW, TACT(SYNC DUBB HIGH)
S905	87-036-170-089	SW, TACT(DATA SYSTEM)(D1)
S906	87-036-170-089	SW, TACT(PLAY◀)(D1)
S907	87-036-170-089	SW, TACT(PLAY◀)(D2)
S908	87-036-170-089	SW, TACT(SYNC DUBB NORMAL)
S909	87-036-170-089	SW, TACT(DUAL REC)
S910	87-036-170-089	SW, TACT(PLAY▶)(D1)
S911	87-036-170-089	SW, TACT(PLAY▶)(D2)
S912	87-036-170-089	SW, TACT(DATA SYSTEM)(D2)
S913	87-036-170-089	SW, TACT(REC FADER)
S914	87-036-170-089	SW, TACT(◀◀MS)(D1)
S915	87-036-170-089	SW, TACT(◀◀MS)(D2)
S916	87-036-170-089	SW, TACT(LAP TIME)
S917	87-036-170-089	SW, TACT(REPEAT/BLANK SKIP)
S918	87-036-170-089	SW, TACT(MS▶▶)(D1)
S919	87-036-170-089	SW, TACT(MS▶▶)(D2)
S920	87-036-170-089	SW, TACT(DOLBY NR)
S921	87-036-170-089	SW, TACT(REV. MODE)
S922	87-036-170-089	SW, TACT(REC/REC MUTE)(D2)
S923	87-036-170-089	SW, TACT(PAUSE)(D2)
S924	87-036-170-089	SW, TACT(COUNTER RESET)(D1)
S925	87-036-170-089	SW, TACT(COUNTER RESET)(D2)
S926	87-036-170-089	SW, TACT(PAUSE)(D1)
S927	87-036-170-089	SW, TACT(REC/REC MUTE)(D1)
S928	87-036-170-089	SW, TACT(DISPLAY MODE)
S929	87-036-170-089	SW, TACT(PLAY TRIM)

=== JACK CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
C777	★87-018-134-089	CAP, TC-U 0.01-16 Y
J771	★87-009-355-019	JACK, 6.3 GLD HLJ1520(PHONES)

=== DECK-1 CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
S1	87-036-110-019	SW, PUSH(PLAY)
S2	86-575-632-210	SW, FR(FR)
S3	87-036-110-019	SW, PUSH(ST)
S4	87-036-109-019	SW, PUSH(CR02)
S5	87-036-109-019	SW, PUSH(REA)
S6	87-036-109-019	SW, PUSH(REB)
S7	87-036-110-019	SW, PUSH(MT)

REF. NO.	PART NO.	DESCRIPTION
SFR1	★87-024-331-019	SFR, 5K
SFR2	★87-024-331-019	SFR, 5K
SOL1	★86-575-622-019	SOL ASSY(PLAY)
SOL2	★86-575-622-019	SOL ASSY(FR)

=== DECK-2 CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
S11	87-036-110-019	SW, PUSH(PLAY)
S12	86-575-632-210	SW, FR(FR)
S13	87-036-110-019	SW, PUSH(CST)
S14	87-036-109-019	SW, PUSH(CR02)
S15	87-036-109-019	SW, PUSH(REA)
S16	87-036-109-019	SW, PUSH(REB)
S17	87-036-110-019	SW, PUSH(MT)
SFR11	★87-024-331-019	SFR, 5K
SFR12	★87-024-331-019	SFR, 5K
SOL11	★86-575-622-019	SOL ASSY(PLAY)
SOL12	★86-575-622-019	SOL ASSY(FR)

=== FL CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
C901	★87-010-408-089	CAP, E 47-50 SME
C902	★87-010-405-089	CAP, E 10-50 SME
C903	★87-010-402-089	CAP, E 2.2-50 SME
C904	★87-010-405-089	CAP, E 10-50 SME
C905	★87-010-405-089	CAP, E 10-50 SME
C908	★87-018-109-089	CAP, TC-U 22P-50 SL
C909	★87-018-109-089	CAP, TC-U 22P-50 SL
C910	★87-018-214-089	CAP, TC-U 0.1-50 F
C911	★87-010-405-089	CAP, E 10-50 SME
C912	★87-018-127-089	CAP, TC-U 470P-50 B
C913	★87-010-252-089	CAP ELECT (TAPG) 1000-6.3V
C971	★87-010-244-089	CAP, E 22-16 5L
C972	★87-010-417-089	CAP, E 2.2-35 5L
C973	★87-010-244-089	CAP, E 22-16 5L
C974	★87-010-417-089	CAP, E 2.2-35 5L
C975	★87-010-405-089	CAP, E 10-50 SME
C978	★87-018-209-089	CAP, TC-U 0.1-50 F
CF901	★87-030-264-089	CERA LOCK(MU)12.0MHZ
FL901	82-DW1-629-019	FL, BJ 108GK(DISPLAY)
L901	87-003-098-089	COIL, 2.2UH
S901	82-DW1-639-019	SW, SL SSSF013(TIMER)
VR901	★82-DW1-640-019	VR, 10KB RK11K1130(REC LEVEL)

=== RELAY-1 CIRCUIT BOARD SECTION ===

=== RELAY-2 CIRCUIT BOARD SECTION ===

=== SENSOR-1 CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
IC1	87-001-367-019	P-SNSR, SPI-315-05-CD

=== SENSOR-2 CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
IC11	87-001-367-019	P-SNSR, SPI-315-05-CD

=== POWER-1 CIRCUIT BOARD SECTION ===

=== POWER-2 CIRCUIT BOARD SECTION ===

=== MISCELLANEOUS ===

REF. NO.	PART NO.	DESCRIPTION
△	★82-187-797-019	AC CORD(E)(HE, E)
△	★82-187-796-019	AC CORD(BS)(K)

REF. NO.	PART NO.	DESCRIPTION
M1	87-045-348-019	MOT, SHW 2L 70(D1)
M11	87-045-348-019	MOT, SHW 2L 70(D2)
△PT801	82-DW1-621-019	PT, HE(HE)
△PT801	82-DW1-622-019	PT, E(E)
△PT801	82-DW1-623-019	PT, K(K)
RPEH	87-046-392-019	HEAD, RPEH, HADKH5598A(D1)
RPEH	87-046-392-019	HEAD, RPEH, HADKH5598A(D2)

ELECTRICAL MAIN PARTS LIST − 2 (AD − WX828)

=== IC ===

REF. NO.	PART NO.	DESCRIPTION
	87-002-282-019	IC, BU4066B
	87-002-444-019	IC, BU4094B
	87-002-669-010	IC, GP 1U 571X(REMOTE SENSOR)
	87-002-932-010	IC, HA12155NT-01
	87-001-334-019	IC, LB 9051A
	82-DW1-630-010	IC, LC866016A-5300
	87-002-328-010	IC, M5218AL
	87-020-758-019	IC, NJM 2068 SD
	87-027-565-019	IC, TC4081BP

=== TRANSISTOR ===

REF. NO.	PART NO.	DESCRIPTION
	89-503-735-089	TR, FET 2SK373-GR (TPE2)
	87-026-463-089	TR, 2SA933S (RS)
	89-109-521-089	TR, 2SA952K
	89-112-965-089	TR, 2SA1296GR
	89-213-302-089	TR, 2SB1330Q
	89-213-702-019	TR, 2SB1370E
	87-026-462-089	TR, 2SC1740S (RS)
	89-309-456-089	TR, 2SC945L P
	89-318-155-089	TR, 2SC1815GR
	89-320-011-089	TR, 2SC2001K
	89-322-406-089	TR, 2SC2240BL
	89-406-555-089	TR, 2SD655E
	87-026-288-089	TR, DTA143XS
	87-026-464-089	TR, DTC114TS
	87-026-215-089	TR, DTC114YS
	87-026-218-089	TR, DTC144ES

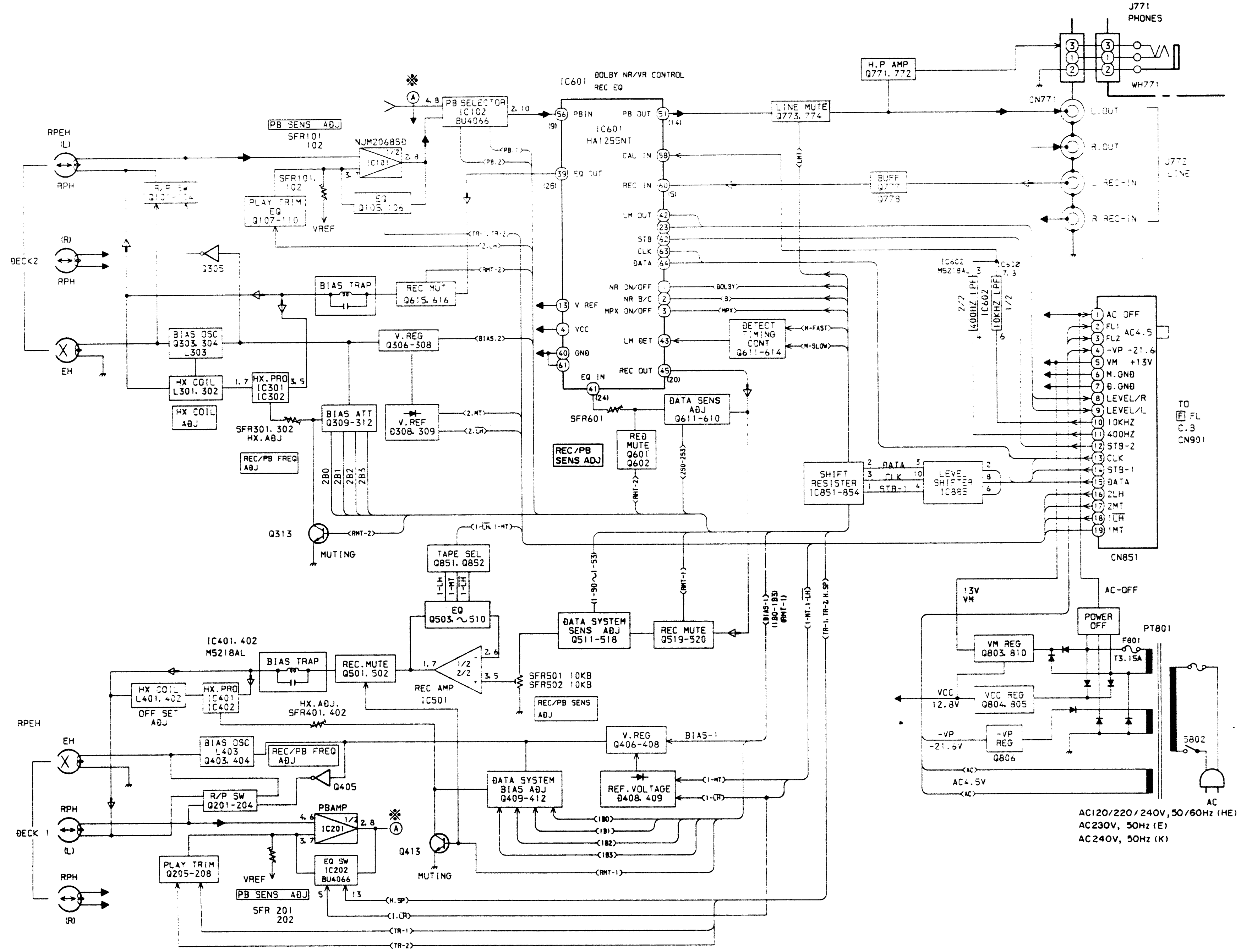
=== DIODE ===

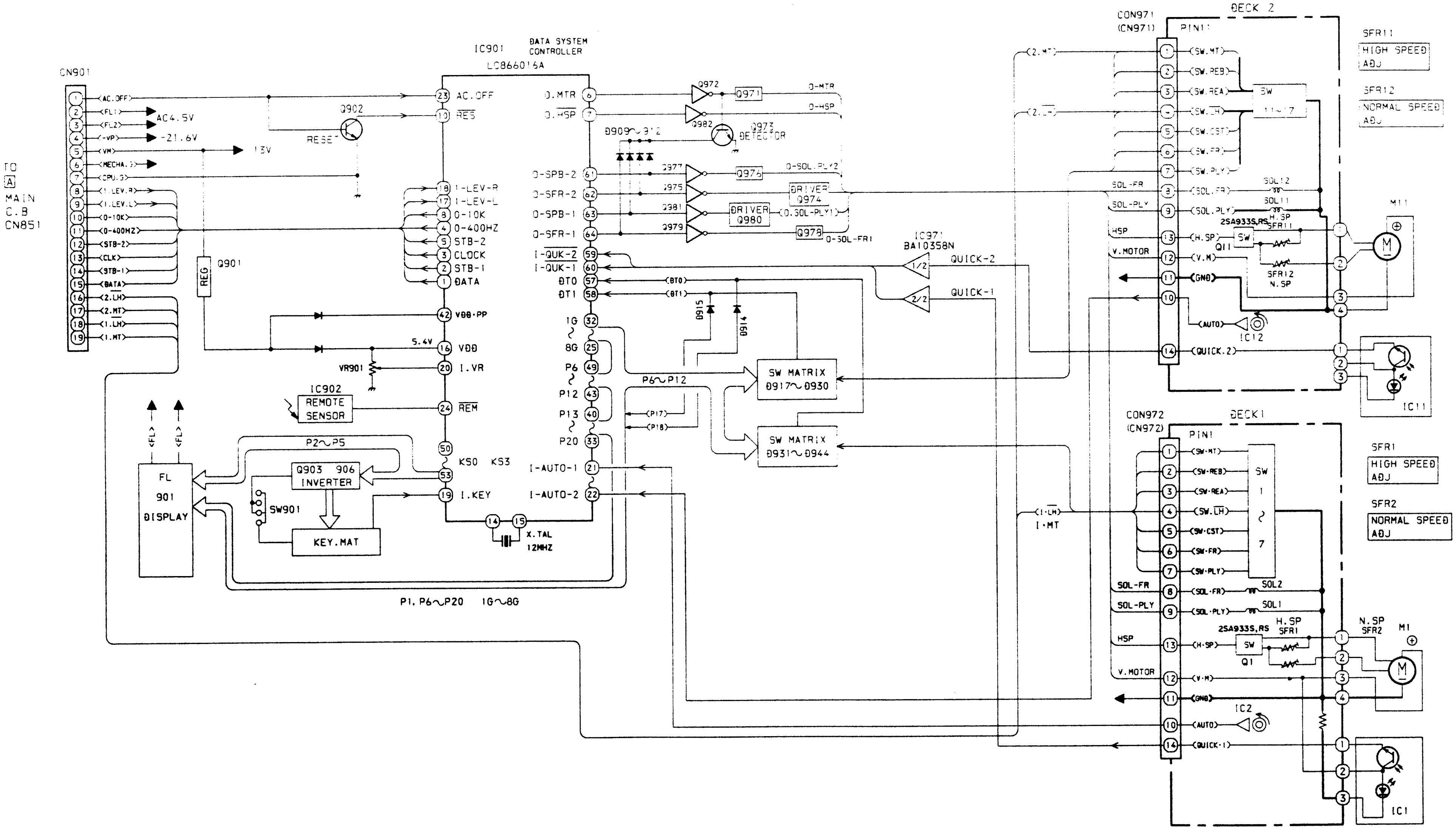
REF. NO.	PART NO.	DESCRIPTION
	87-001-783-089	DIODE, 1N4002-T
	87-001-559-089	DIODE, 1SS131 (T-72)
	87-020-465-089	DIODE, 1SS133 T-72
	87-020-123-089	DIODE, DS446-AT (TA)
	87-017-183-089	ZENER, HZS12A3L
	87-017-143-089	ZENER, HZS22-2
	87-001-636-089	ZENER, HZS3C1
	87-001-936-089	ZENER, HZS7A3L
	87-001-911-089	ZENER, UTZJ4.7A (TAPG)

=== MAIN CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
C101	★87-018-121-089	CAP, TC-U 150P-50 B
C102	★87-018-121-089	CAP, TC-U 150P-50 B
C103	★87-018-123-089	CAP, TC-U 220P-50 B
C104	★87-018-123-089	CAP, TC-U 220P-50 B
C109	★87-010-405-089	CAP, E 10-50 SME
C110	★87-010-405-089	CAP, E 10-50 SME
C111	★87-010-405-089	CAP, E 10-50 SME
C112	★87-010-405-089	CAP, E 10-50 SME
C117	★87-018-129-089	CAP, TC-U 680P-50 B
C118	★87-018-129-089	CAP, TC-U 680P-50 B
C119	★87-010-404-089	CAP, E 4.7-50 SME
C120	★87-010-404-089	CAP, E 4.7-50 SME
C121	★87-010-384-089	CAP, E 100-25 SME
C122	★87-018-134-089	CAP, TC-U 0.01-16 Y
C124	★87-018-134-089	CAP, TC-U 0.01-16 Y
C125	★87-018-126-089	CAP, TC-U 390P-50 B
C126	★87-018-123-089	CAP, TC-U 220P-50 B
C203	★87-018-124-089	CAP, TC-U 270P-50 B
C204	★87-018-124-089	CAP, TC-U 270P-50 B
C213	★87-010-405-089	CAP, E 10-50 SME
C214	★87-010-405-089	CAP, E 10-50 SME
C215	★87-010-405-089	CAP, E 10-50 SME
C216	★87-010-405-089	CAP, E 10-50 SME
C217	★87-010-384-089	CAP, E 100-25 SME
C218	★87-018-134-089	CAP, TC-U 0.01-16 Y
C220	★87-018-134-089	CAP, TC-U 0.01-16 Y
C221	★87-018-126-089	CAP, TC-U 390P-50 B
C222	★87-018-123-089	CAP, TC-U 220P-50 B
C301	★87-018-123-089	CAP, TC-U 220P-50 B
C302	★87-018-123-089	CAP, TC-U 220P-50 B
C303	★87-018-131-089	CAP, TC-U 1000P-50 B
C304	★87-018-131-089	CAP, TC-U 1000P-50 B
C309	★87-018-126-089	CAP, TC-U 390P-50 B
C310	★87-018-126-089	CAP, TC-U 390P-50 B
C313	★87-018-131-089	CAP, TC-U 1000P-50 B
C314	★87-018-131-089	CAP, TC-U 1000P-50 B
C317	★87-010-260-089	CAP, E 47-25 SME
C318	★87-010-260-089	CAP, E 47-25 SME
C319	★87-018-131-089	CAP, TC-U 1000P-50 B
C320	★87-014-081-089	PPCAP 0.01J
C323	★87-018-201-089	CAP, TC-U 5600P-16 X
C325	★87-010-248-089	CAP, E 220-10 SME
C326	★87-010-401-089	CAP, E 1-50 SME
C327	★87-010-401-089	CAP, E 1-50 SME
C329	★87-010-405-089	CAP, E 10-50 SME
C601	★87-018-121-089	CAP, TC-U 150P-50 B
C602	★87-018-121-089	CAP, TC-U 150P-50 B
C603	★87-010-404-089	CAP, E 4.7-50 SME
C604	★87-010-404-089	CAP, E 4.7-50 SME
C605	★87-010-546-089	CAP, E 0.33-50 SME
C606	★87-010-546-089	CAP, E 0.33-50 SME
C607	★87-010-402-089	CAP, E 2.2-50 SME
C608	★87-010-402-089	CAP, E 2.2-50 SME
C609	★87-010-401-089	CAP, E 1-50 SME
C610	★87-010-401-089	CAP, E 1-50 SME
C611	★87-018-132-089	CAP, TC-U 2200P-16 X
C612	★87-018-132-089	CAP, TC-U 2200P-16 X
C613	★87-018-121-089	CAP, TC-U 150P-50 B
C614	★87-018-121-089	CAP, TC-U 150P-50 B
C615	★87-010-404-089	CAP, E 4.7-50 SME
C616	★87-010-404-089	CAP, E 4.7-50 SME
C627	★87-010-404-089	CAP, E 4.7-50 SME
C628	★87-010-404-089	CAP, E 4.7-50 SME
C631	★87-010-401-089	CAP, E 1-50 SME
C632	★87-010-401-089	CAP, E 1-50 SME
C633	★87-010-405-089	CAP, E 10-50 SME
C634	★87-010-401-089	CAP, E 1-50 SME
C636	★87-018-119-089	CAP, TC-U 100P-50 B
C638	★87-018-195-089	CAP, TC-U 1200P-16 X
C643	★87-010-405-089	CAP, E 10-50 SME
C644	★87-010-370-089	CAP, E 330-6.3 SME
C645	★87-010-401-089	CAP, E 1-50 SME
C646	★87-010-401-089	CAP, E 1-50 SME
C647	★87-010-401-089	CAP, E 1-50 SME
C648	★87-018-121-089	CAP, TC-U 150P-50 B
C649	★87-018-121-089	CAP, TC-U 150P-50 B
C650	★87-018-121-089	CAP, TC-U 150P-50 B
C651	★87-010-401-089	CAP, E 1-50 SME
C652	★87-010-405-089	CAP, E 10-50 SME
C653	★87-018-134-089	CAP, TC-U 0.01-16 Y
C654	★87-018-134-089	CAP, TC-U 0.01-16 Y
C671	★87-018-134-089	CAP, TC-U 0.01-16 Y
C672	★87-018-134-089	CAP, TC-U 0.01-16 Y
C771	★87-010-401-089	CAP, E 1-50 SME
C772	★87-010-401-089	CAP, E 1-50 SME
C773	★87-010-263-089	CAP, E 100-10

BLOCK DIAGRAM (AD – WX929)


J771
PHONES
WH771
H.P AMP
Q771, 772
IC601
DOLBY NR/VR CONTROL
REC EQ
HA12255NT
PB SELECTOR
IC102
BU4066
PB SENS ADJ
SFR101
102
NJM2068SD
IC101
RPEH
RPH
EH
DECK2
DECK 1
R/P SW
Q101-104
SFR101, 102
PLAY TRIM
EQ
Q107-110
VREF
EQ
Q105, 106
Q305
BIAS TRAP
REC MUT
Q615, 616
BIAS OSC
Q303, 304
L303
V.REG
Q306-308
HX COIL
L301, 302
HX.PRO
IC301
IC302
HX COIL ADJ
SFR301, 302
HX.ADJ
REC/PB FREQ ADJ
BIAS ATT
Q309-312
V.REF
D308, 309
2B0
2B1
2B2
2B3
Q313
MUTING
PB IN
PB OUT
CAL IN
EQ OUT
REC IN
LM OUT
STB
CLK
DATA
NR ON/OFF
NR B/C
MPX ON/OFF
V REF
VCC
GND
LM DET
REC OUT
EQ IN
SFR601
REC/PB SENS ADJ
DATA SENS ADJ
Q611-610
REC MUTE
Q601
Q602
DETECT TIMING CONT
Q611-614
LINE MUTE
Q773, 774
BUFF
Q777
Q778
CN771
L.OUT
R.OUT
L REC-IN
R REC-IN
J772
LINE
IC602
M5218AL
400HZ LPF
10KHZ LPF
SHIFT RESISTER
IC851-854
LEVEL SHIFTER
IC865
DATA
CLK
STB-1
AC OFF
FL1
FL2
AC4.5
-VP -21.6
VM +13V
M.GND
D.GND
LEVEL/R
LEVEL/L
10KHZ
400HZ
STB-2
CLK
STB-1
DATA
2LH
2MT
1LH
1MT
CN851
TO
F FL
C.B
CN901
TAPE SEL
Q851, Q852
EQ
Q503 ~ 510
DATA SYSTEM SENS ADJ
Q511-518
REC MUTE
Q519-520
IC401, 402
M5218AL
BIAS TRAP
REC.MUTE
Q501, 502
REC AMP
IC501
SFR501 10KB
SFR502 10KB
REC/PB SENS ADJ
HX COIL
L401, 402
OFF SET ADJ
HX.PRO
IC401
IC402
HX.ADJ.
SFR401, 402
BIAS OSC
L403
Q403, 404
REC/PB FREQ ADJ
Q405
R/P SW
Q201-204
PBAMP
IC201
PLAY TRIM
Q205-208
VREF
PB SENS ADJ
SFR 201
202
EQ SW
IC202
BU4066
Q413
MUTING
V.REG
Q406-408
BIAS-1
DATA SYSTEM BIAS ADJ
Q409-412
REF.VOLTAGE
D408, 409
13V
VM
AC-OFF
POWER OFF
PT801
F801
T3.15A
VM REG
Q803, 810
VCC
12.8V
VCC REG
Q804, 805
-VP
-21.5V
-VP REG
Q806
S802
AC4.5V
AC
AC120/220/240V, 50/60Hz (HE)
AC230V, 50Hz (E)
AC240V, 50Hz (K)


CN901
TO A MAIN C.B CN851
(AC.OFF)
(FL1)
(FL2)
AC4.5V
(-VP)
-21.6V
(VM)
13V
(MECHA.G)
(CPU.G)
(I.LEV.R)
(I.LEV.L)
(0-10K)
(0-400HZ)
(STB-2)
(CLK)
(STB-1)
(DATA)
(2.LH)
(2.MT)
(1.LH)
(1.MT)
Q902
RESET
REG
Q901
IC901
DATA SYSTEM CONTROLLER
LC866016A
AC.OFF
RES
I-LEV-R
I-LEV-L
0-10K
0-400HZ
STB-2
CLOCK
STB-1
DATA
VDD-PP
5.4V
VDD
I.VR
VR901
IC902
REMOTE SENSOR
REM
KS0 KS3
I.KEY
X.TAL 12MHZ
P2~P5
Q903 906 INVERTER
SW901
KEY.MAT
FL 901 DISPLAY
(FL)
(FL)
P1, P6~P20 1G~8G
O.MTR
O.HSP
O-SPB-2
O-SFR-2
O-SPB-1
O-SFR-1
I-QUK-2
I-QUK-1
DT0
DT1
1G
8G
P6
P12
P13
P20
I-AUTO-1
I-AUTO-2
Q972
Q971
O-MTR
O-HSP
Q982
Q973 DETECTOR
D909~912
Q977
Q976
O-SOL.PLY2
Q975
DRIVER Q974
Q981
DRIVER Q980
(O.SOL-PLY1)
Q979
Q978
O-SOL-FR1
IC971 BA10358N
1/2
2/2
QUICK-2
QUICK-1
(DT0)
(DT1)
D915
D914
P6~P12
(P17)
(P18)
SW MATRIX D917~D930
SW MATRIX D931~D944
CON971 (CN971)
DECK 2
PIN1
(2.MT)
(2.LH)
(SW.MT)
(SW.REB)
(SW.REA)
(SW.LH)
(SW.CST)
(SW.FR)
(SW.PLY)
SW 11~17
SOL-FR
(SOL.FR)
SOL12
SOL-PLY
(SOL.PLY)
SOL11
HSP
(H.SP)
2SA933S,RS
SW
Q11
H.SP SFR11
V.MOTOR
(V.M)
SFR12 N.SP
(GND)
(AUTO)
IC12
(QUICK.2)
M11
IC11
SFR11
HIGH SPEED ADJ
SFR12
NORMAL SPEED ADJ
CON972 (CN972)
DECK1
PIN1
(SW-MT)
(SW-REB)
(SW-REA)
(SW.LH)
(SW-CST)
(SW-FR)
(SW-PLY)
SW 1 ~ 7
(1-LH)
1-MT
SOL-FR
(SOL-FR)
SOL2
SOL-PLY
(SOL-PLY)
SOL1
HSP
(H-SP)
2SA933S,RS
SW
Q1
H.SP SFR1
N.SP SFR2
M1
V.MOTOR
(V-M)
(GND)
(AUTO)
IC2
(QUICK-1)
IC1
SFR1
HIGH SPEED ADJ
SFR2
NORMAL SPEED ADJ

REF. NO.	PART NO.	DESCRIPTION
C774	★87-010-263-089	CAP, E 100-10
C775	★87-010-401-089	CAP, E 1-50 SME
C776	★87-010-401-089	CAP, E 1-50 SME
C778	★87-018-134-089	CAP, TC-U 0.01-16 Y
C779	★87-010-401-089	CAP, E 1-50 SME
C780	★87-010-401-089	CAP, E 1-50 SME
△C801	★87-010-453-099	CAP ELECT 4700-25V SME
△C802	★87-010-389-099	CAP ELECT 2200-25V SME
C803	★87-010-247-089	CAP, E 100-50 SME
C804	★87-010-405-089	CAP, E 10-50 SME
C805	★87-010-382-089	CAP, E 22-25 SME
C806	★87-010-235-089	CAP, E 470-16 SME
C807	★87-010-401-089	CAP, E 1-50 SME
C808	★87-010-235-089	CAP, E 470-16 SME
C809	★87-010-370-089	CAP, E 330-6.3 SME
C810	★87-019-112-019	CAP, SG 0.01 E
C851	★87-010-405-089	CAP, E 10-50 SME
C852	★87-010-248-089	CAP, E 220-10 SME
C857	★87-018-134-089	CAP, TC-U 0.01-16 Y
△F801	87-035-366-019	FUSE 2.5A 250V T E/K
J772	★87-009-394-019	JACK PIN 4P EARTH(LINE IN/OUT)
L301	★80-DS4-618-010	COIL HX85K-4
L302	★80-DS4-618-010	COIL HX85K-4
L303	80-DS4-617-010	COIL OSC 85K-4
L601	★80-DS2-611-019	FLTR, MPX 85K-CAN
L602	★80-DS2-611-019	FLTR, MPX 85K-CAN
L603	★82-231-622-080	COIL, 22MH-J
L604	★82-231-622-080	COIL, 22MH-J
△S801	★87-036-015-019	AC SW SDDLDI(POWER)
△S802	87-036-136-019	SW ROTARY 1-1-3 H BI(AC VOLTAGE)
SFR101	★87-024-168-089	SFR, 1K DIA6 V
SFR102	★87-024-168-089	SFR, 1K DIA6 V
SFR201	★87-024-168-089	SFR, 1K DIA6 V
SFR202	★87-024-168-089	SFR, 1K DIA6 V
SFR301	★87-024-176-089	SFR, 100K DIA6 V
SFR302	★87-024-176-089	SFR, 100K DIA6 V
SFR601	★87-024-175-089	SFR, 47K DIA6 V
SFR602	★87-024-175-089	SFR, 47K DIA6 V

=== FRONT CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
S902	87-036-170-089	SW, TACT(STOP)(D1)
S903	87-036-170-089	SW, TACT(STOP)(D2)
S904	87-036-170-089	SW, TACT(SYNC DUBB HIGH)
S906	87-036-170-089	SW, TACT(PLAY◀)(D1)
S907	87-036-170-089	SW, TACT(PLAY◀)(D2)
S908	87-036-170-089	SW, TACT(SYNC DUBB NORMAL)
S910	87-036-170-089	SW, TACT(PLAY▶)(D1)
S911	87-036-170-089	SW, TACT(PLAY▶)(D2)
S912	87-036-170-089	SW, TACT(DATA SYSTEM)(D2)
S913	87-036-170-089	SW, TACT(REC FADER)
S914	87-036-170-089	SW, TACT(◀◀ MS)(D1)
S915	87-036-170-089	SW, TACT(◀◀ MS)(D2)
S916	87-036-170-089	SW, TACT(LAP TIME)
S917	87-036-170-089	SW, TACT(REPEAT/BLANK SKIP)
S918	87-036-170-089	SW, TACT(MS ▶▶)(D1)
S919	87-036-170-089	SW, TACT(MS ▶▶)(D2)
S920	87-036-170-089	SW, TACT(DOLBY NR)
S921	87-036-170-089	SW, TACT(REV. MODE)
S922	87-036-170-089	SW, TACT(REC/REC MUTE)(D2)
S923	87-036-170-089	SW, TACT(PAUSE)(D2)
S924	87-036-170-089	SW, TACT(COUNTER RESET)(D1)
S925	87-036-170-089	SW, TACT(COUNTER RESET)(D2)

=== JACK CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
C777	★87-018-134-089	CAP, TC-U 0.01-16 Y
J771	★87-009-355-019	JACK, 6.3 GLD HLJ1520(PHONES)

=== DECK-1 CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
S1	87-036-110-019	SW, PUSH(PLAY)
S2	86-575-632-210	SW, FR(FR)
S3	87-036-110-019	SW, PUSH(CST)
S4	87-036-110-019	SW, PUSH(CRO2)
SFR1	★87-024-331-019	SFR, 5K
SFR2	★87-024-331-019	SFR, 5K
SOL1	★86-575-622-019	SOL ASSY(PLAY)
SOL2	★86-575-622-019	SOL ASSY(FR)

=== DECK-2 CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
S11	87-036-110-019	SW, PUSH(PLAY)
S12	86-575-632-210	SW, FR(FR)
S13	87-036-110-019	SW, PUSH(CST)
S14	87-036-110-019	SW, PUSH(CRO2)
S15	87-036-109-019	SW, PUSH(REA)
S16	87-036-110-019	SW, PUSH(REB)
S17	87-036-110-019	SW, PUSH(MT)
SFR11	★87-024-331-019	SFR, 5K
SFR12	★87-024-331-019	SFR, 5K
SOL11	★86-575-622-019	SOL ASSY(PLAY)
SOL12	★86-575-622-019	SOL ASSY(FR)

=== FL CIRCUIT BOARD SECTION ===

REF. NO.	PART NO.	DESCRIPTION
C901	★87-010-408-089	CAP, E 47-50 SME
C902	★87-010-405-089	CAP, E 10-50 SME
C903	★87-010-402-089	CAP, E 2.2-50 SME
C904	★87-010-405-089	CAP, E 10-50 SME
C905	★87-010-405-089	CAP, E 10-50 SME
C908	★87-018-109-089	CAP, TC-U 22P-50 SL
C909	★87-018-109-089	CAP, TC-U 22P-50 SL
C910	★87-018-209-089	CAP, TC-U 0.1-50 B
C911	★87-010-405-089	CAP, E 10-50 SME
C912	★87-018-127-089	CAP, TC-U 470P-50 B
C913	★87-010-252-089	CAP ELECT (TAPG) 1000-6.3V
C975	★87-010-405-089	CAP, E 10-50 SME
C976	★87-018-209-080	CAP, TC-U 0.1-50F
C977	★87-018-209-08	CAP, TC-U 0.1-50F
C978	★87-018-209-08	CAP, TC-U 0.1-50F
CF901	★87-030-264-089	CERA LOCK(MU)12.0MHZ
FL901	82-DW1-629-019	FL, BJ 108GK(DISPLAY)
L901	87-003-098-089	COIL, 2.2UH
S901	82-DW1-639-019	SW, SL SSSF013(TIMER)
VR901	★82-DW1-640-019	VR, 10KB RK11K1130(REC LEVEL)

=== RELAY-1 CIRCUIT BOARD SECTION ===

=== RELAY-2 CIRCUIT BOARD SECTION ===

=== POWER-1 CIRCUIT BOARD SECTION ===

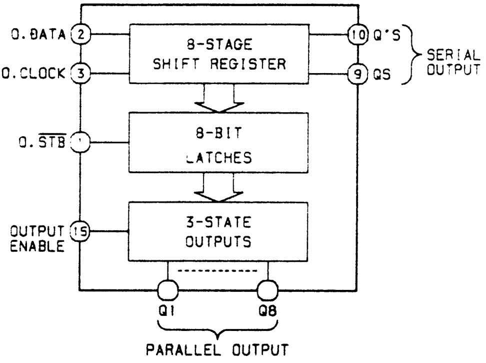
=== POWER-2 CIRCUIT BOARD SECTION ===

=== MISCELLANEOUS ===

REF. NO.	PART NO.	DESCRIPTION
△	★82-187-797-019	AC CORD(E)(HE, E)
△	★82-187-796-019	AC CORD(BS)(K)
M1	87-045-348-019	MOT, SHW 2L 70(D1)
M11	87-045-348-019	MOT, SHW 2L 70(D2)
PH	87-046-391-019	HEAD, PH HADKH2542A(D1)
△PT801	82-DW2-621-019	PT, HE(S)(HE)
△PT801	82-DW2-618-019	PT, E(S)(E)
△PT801	82-DW2-619-010	PT, K(S)(K)
RPEH	87-046-390-019	HEAD, RPEH, HADKH5597A(D2)

IC BLOCK DIAGRAM – 1

IC, BU4094B



Q1:O.DOLBY ON
Q2:O.DOLBY C
Q3:O.EXT.REC
Q4:O.INT.REC
Q5:O.PLAY
Q6:O.PB2
Q7:O.LED
Q8:O.$\overline{\text{RMT}}$

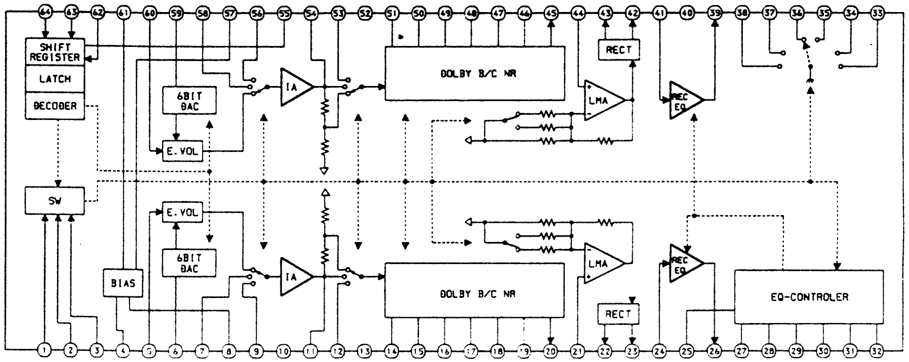
IC, BU4094B

TRUTH TABLE

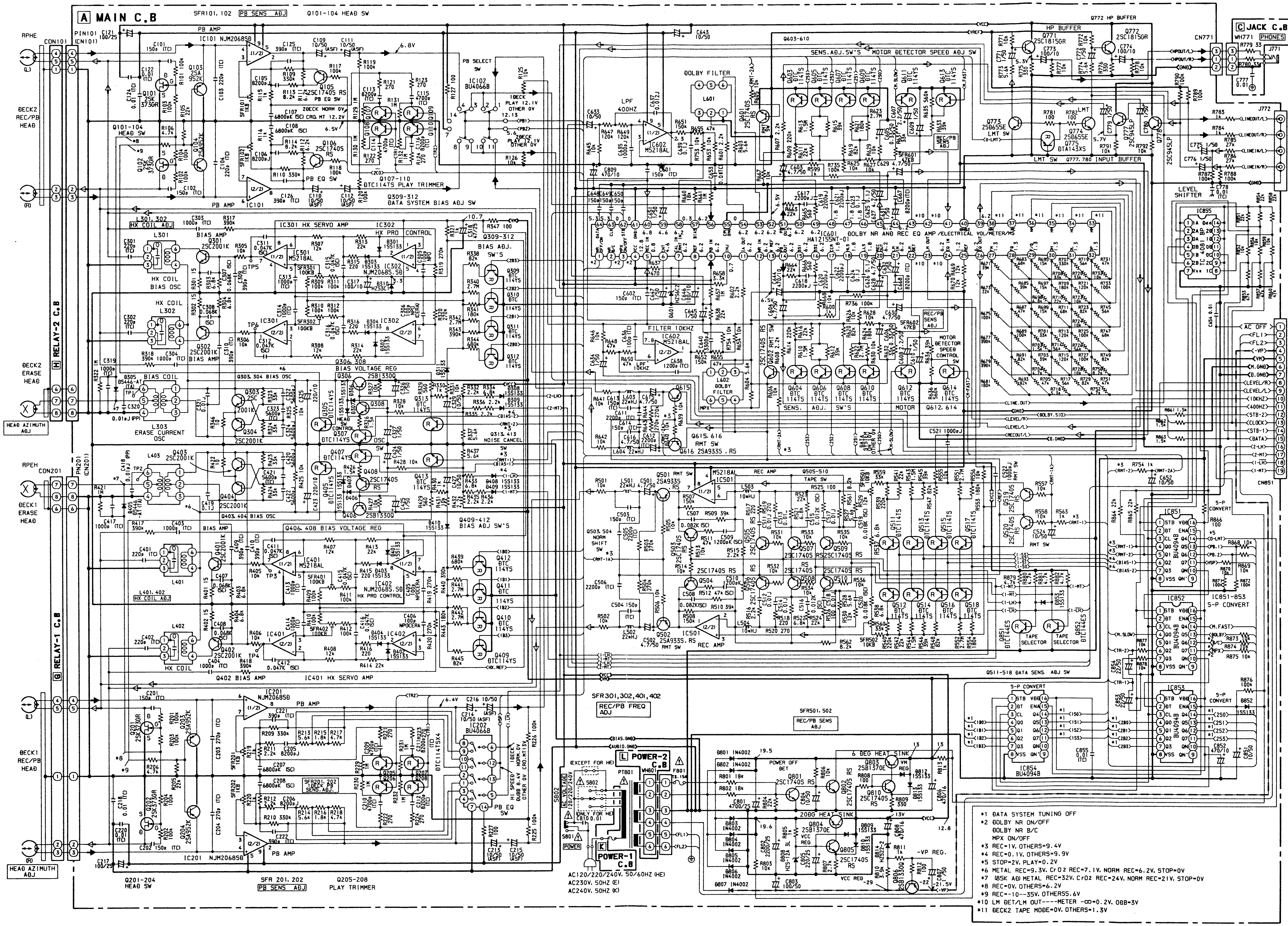
CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	QS	Q'S
↑	L	x	x	Z	Z	Q7	NO CHG.
↓	L	x	x	Z	Z	NO CHG.	QS
↑	H	L	x	NO CHG.	NO CHG.	Q7	NO CHG.
↑	H	H	L	L	Qn-1	Q7	NO CHG.
↑	H	H	H	H	Qn-1	Q7	NO CHG.
↓	H	x	x	NO CHG.	NO CHG.	NO CHG.	QS

Z = HIGH IMPEDANCE
x = DON'T CARE

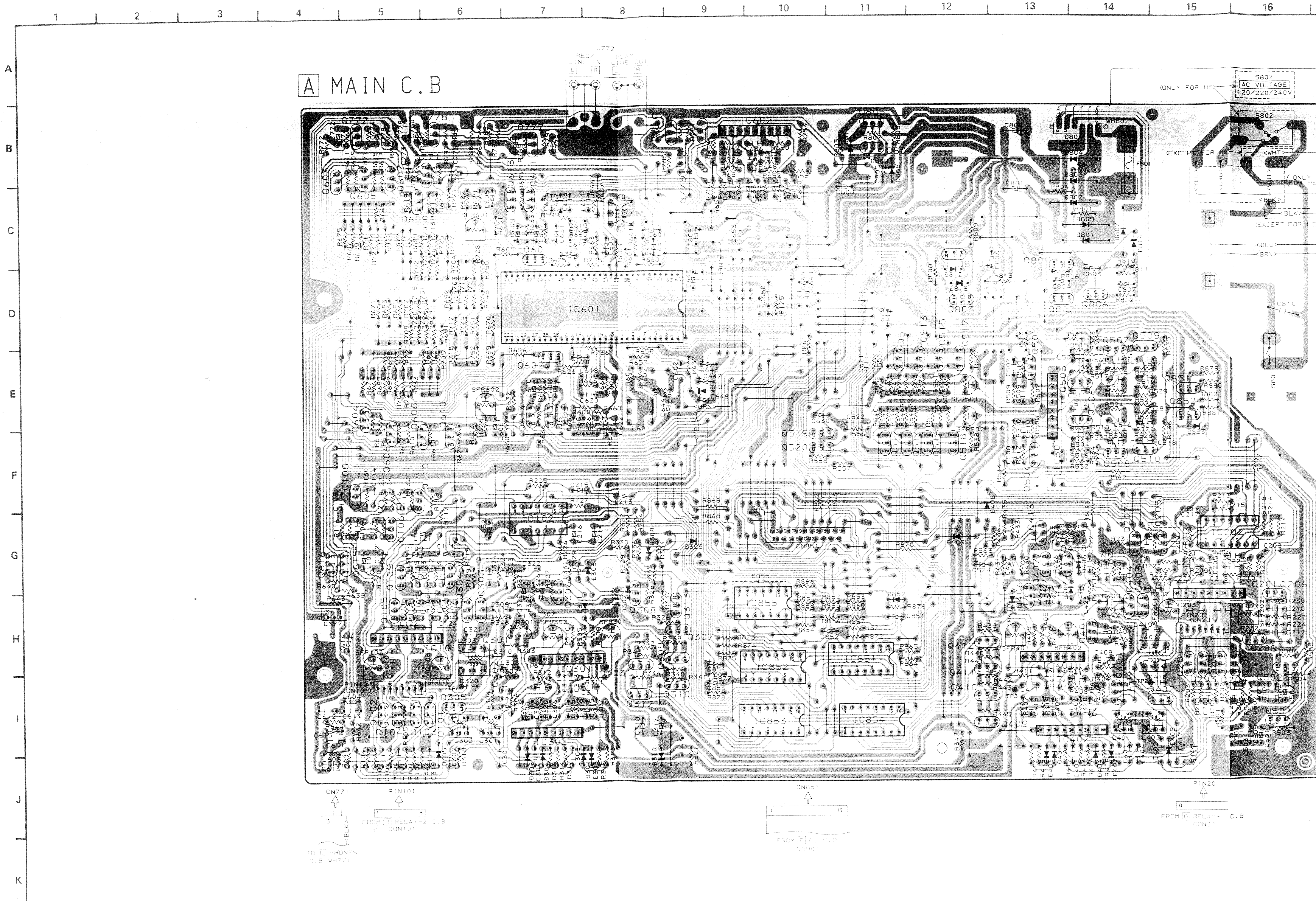
IC, HA12155NT – 01

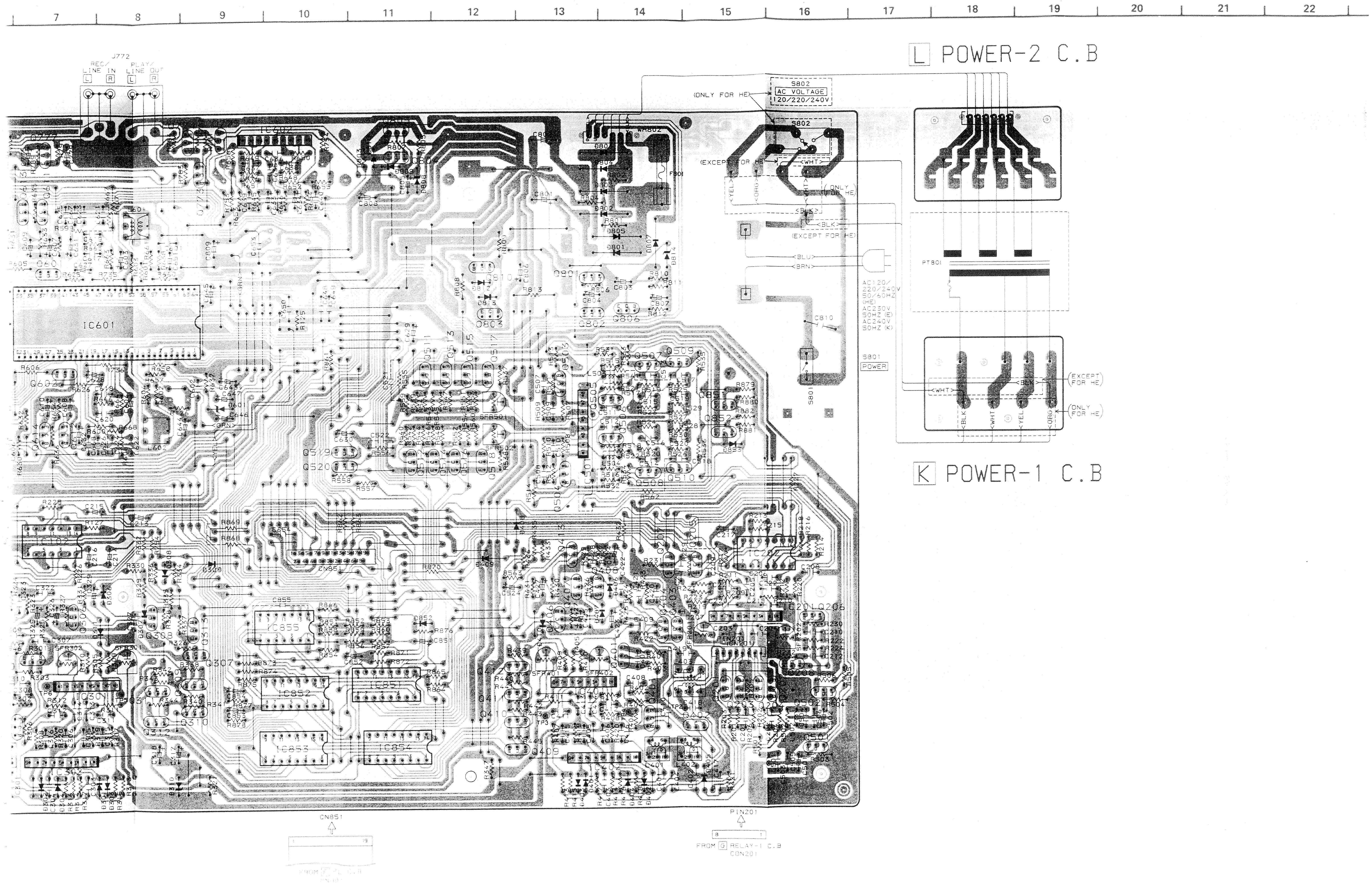


SCHEMATIC DIAGRAM – 1 (AD – WX929)

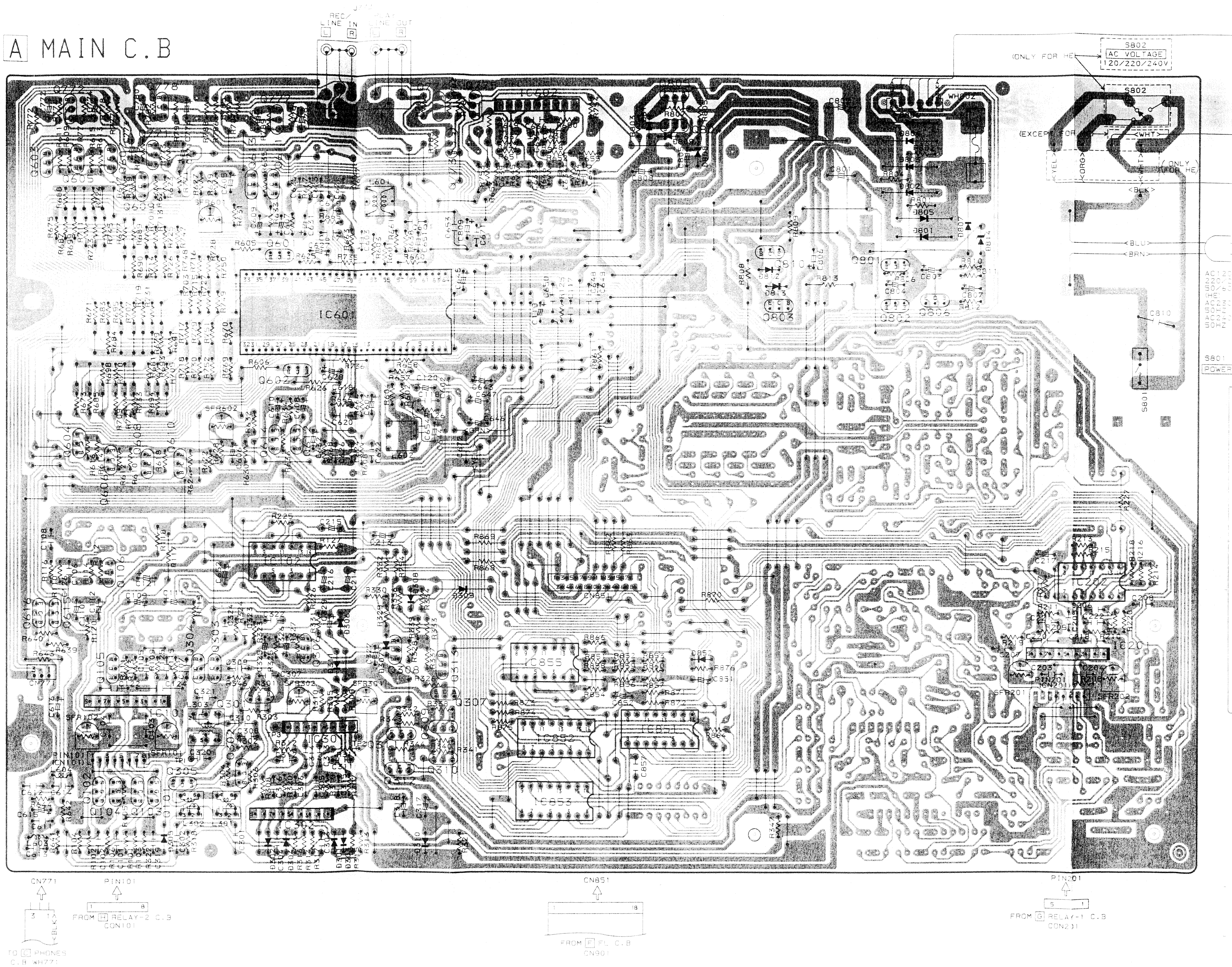

A MAIN C.B
SFR101, 102 PB SENS ADJ
Q101-104 HEAD SW
IC101 NJM2068SD
PB AMP
PB SELECT SW
IC102 BU4066B
Q107-110 DTC114TS PLAY TRIMMER
Q309-312 DATA SYSTEM BIAS ADJ SW
DOLBY FILTER
LPF 400HZ
IC602 M5218AL
Q603-610 SENS. ADJ. SW'S
MOTOR DETECTOR SPEED ADJ SW
Q772 HP BUFFER
C JACK C.B
PHONES
LMT SW
Q777, 780 INPUT BUFFER
PLAY/LINE OUT
REC/LINE IN
LEVEL SHIFTER
IC601 DOLBY NR AND REC EQ AMP /ELECTRICAL VOL/METER/MS
HA12155NT-01
IC301 HX SERVO AMP
IC302 HX PRO CONTROL
HX COIL BIAS OSC
BIAS ADJ. SW'S
BIAS VOLTAGE REG
Q303, 304 BIAS OSC
L303 ERASE CURRENT OSC
NOISE CANCEL
FILTER 10KHZ
RMT SW
Q406, 408 BIAS VOLTAGE REG
Q409-412 BIAS ADJ SW'S
Q402 BIAS AMP
IC401 HX SERVO AMP
IC402 NJM2068S.SD HX PRO CONTROL
Q501 RMT SW
REC AMP
Q505-510 TAPE SW
Q511-518 DATA SENS. ADJ SW
IC851 S-P CONVERT
IC851-853 S-P CONVERT
IC852
IC853
IC854 BU4094B
TAPE SELECTOR
TO F FL C.B CN901
CN851
IC201 NJM2068SD
IC202 BU4066B
PB EQ SW
Q201-204 HEAD SW
SFR 201, 202 PB SENS ADJ
Q205-208 PLAY TRIMMER
SFR301, 302, 401, 402 REC/PB FREQ ADJ
SFR501, 502 REC/PB SENS ADJ
L POWER-2 C.B
K POWER-1 C.B
POWER OFF DET
6 DEG HEAT SINK
20DG HEAT SINK
VCC REG
-VP REG.
AC120/220/240V. 50/60HZ (HE)
AC230V. 50HZ (E)
AC240V. 50HZ (K)
H RELAY-2 C.B
G RELAY-1 C.B
RPHE
RPEH
DECK2 REC/PB HEAD
DECK2 ERASE HEAD
DECK1 ERASE HEAD
DECK1 REC/PB HEAD
HEAD AZIMUTH ADJ

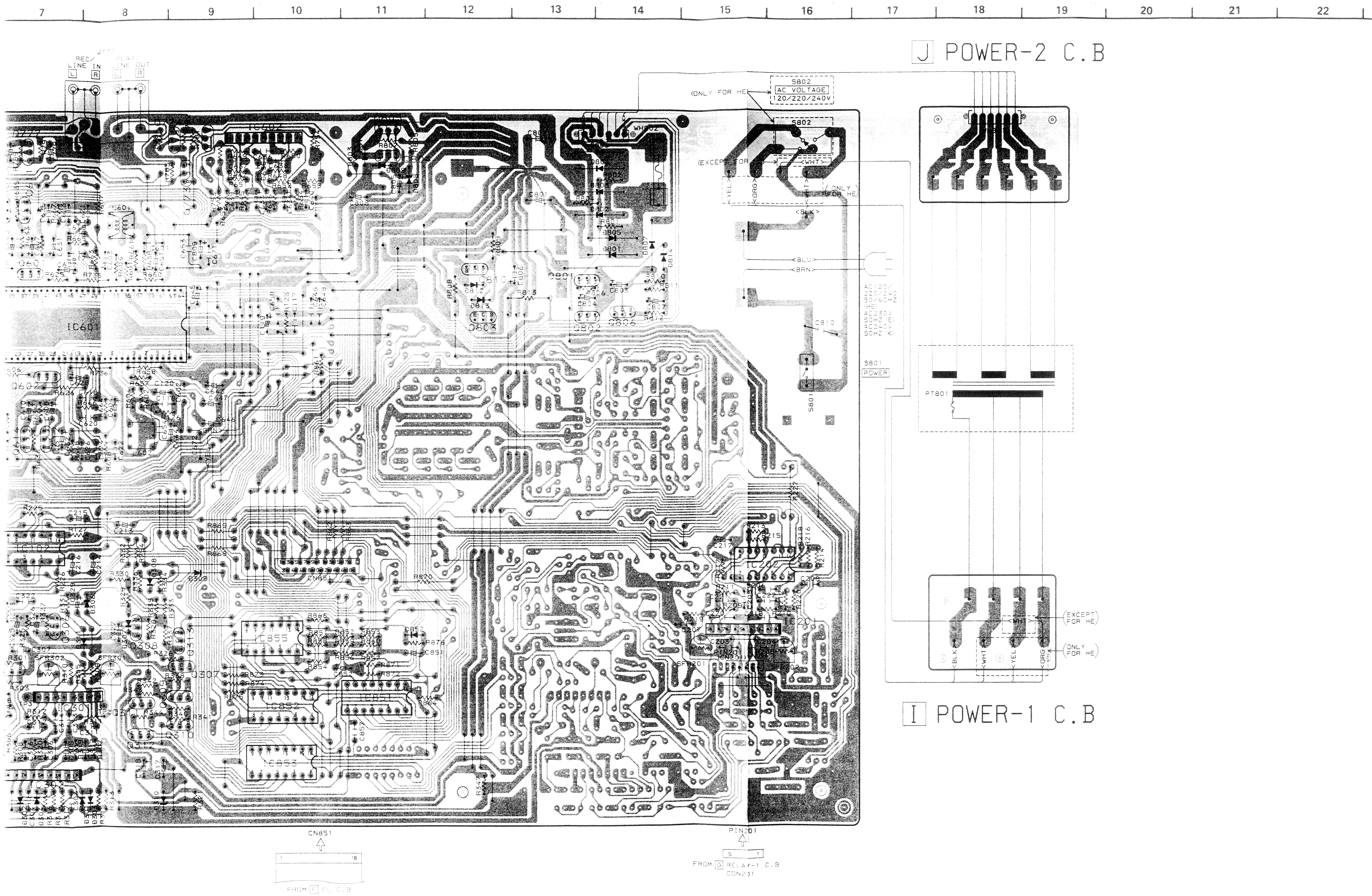
*1 DATA SYSTEM TUNING OFF
*2 DOLBY NR ON/OFF
DOLBY NR B/C
MPX ON/OFF
*3 REC=1V. OTHERS=9.4V
*4 REC=0.1V. OTHERS=9.9V
*5 STOP=2V. PLAY=0.2V
*6 METAL REC=9.3V. CrO2 REC=7.1V. NORM REC=6.2V. STOP=0V
*7 (85K AD) METAL REC=32V. CrO2 REC=24V. NORM REC=21V. STOP=0V
*8 REC=0V. OTHERS=6.2V
*9 REC=-10--35V. OTHERS5.6V
*10 LM DET/LM OUT----METER -∞=0.2V. 0DB=3V
*11 DECK2 TAPE MODE=0V. OTHERS=1.3V


A MAIN C.B
J772
REC/ LINE IN
PLAY LINE OUT
L
R
S802
AC VOLTAGE
120/220/240V
(ONLY FOR HE)
(EXCEPT FOR HE)
<WHT>
<BLK>
<BLU>
<BRN>
<YEL>
IC601
IC602
IC101
IC102
IC201
IC202
IC301
IC302
IC851
IC852
IC853
IC854
IC855
CN851
CN201
F801
S801
CN771
TO E PHONES C.B WH771
PIN101
FROM H RELAY-2 C.B CON101
CN851
FROM F FL C.B CN901
PIN201
FROM G RELAY-1 C.B CON201
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
K


7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
L POWER-2 C.B
K POWER-1 C.B
J772
REC/ LINE IN
PLAY/ LINE OUT
L R L R
S802
AC VOLTAGE
120/220/240V
(ONLY FOR HE)
(EXCEPT FOR HE)
(ONLY FOR HE)
(EXCEPT FOR HE)
<WHT>
<YEL>
<ORG>
<BLK>
<BLU>
<BRN>
AC120/220/240V 50/60HZ (HE)
AC230V 50HZ (E)
AC240V 50HZ (K)
S801 POWER
PT801
F801
IC601
IC602
IC102
IC201
IC301
IC302
IC851
IC852
IC853
IC854
IC855
CN851
PIN201
FROM G RELAY-1 C.B CON201
FROM E C.B

A MAIN C.B

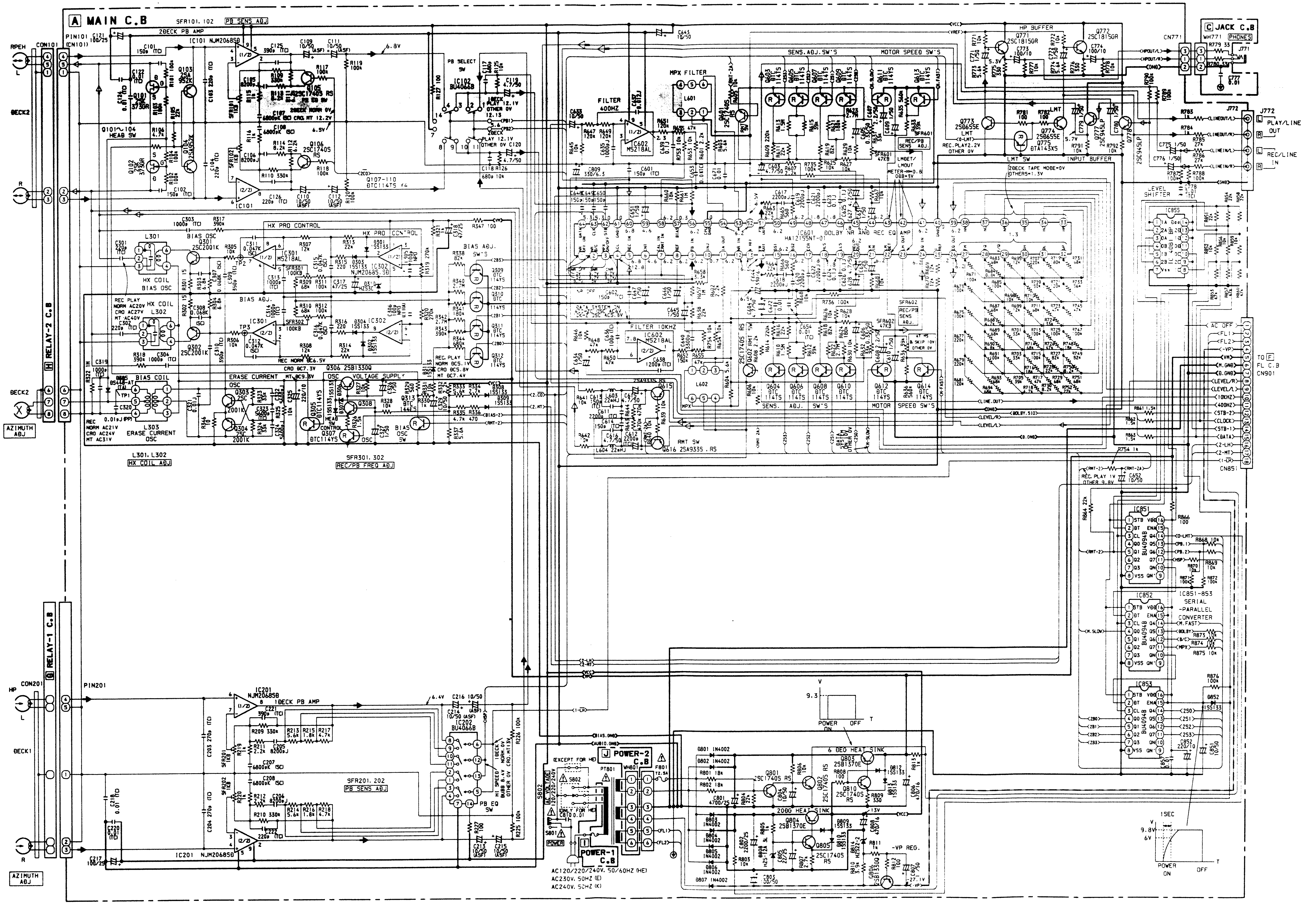

REC/LINE IN
L
R
PLAY/LINE OUT
L
R
IC601
IC602
IC101
IC301
IC302
IC201
IC202
IC851
IC852
IC853
IC855
CN851
CN771
PIN101
PIN201
WH802
(ONLY FOR HE)
S802
AC VOLTAGE
120/220/240V
(EXCEPT FOR
<WHT>
<YEL>
<ORG>
<WHT>
(ONLY FOR HE)
<BLK>
<BLU>
<BRN>
S801
POWER
CN771
3
1
<BLK>
TO C PHONES C.B WH771
PIN101
1
8
FROM H RELAY-2 C.B CON101
CN851
1
18
FROM F FL C.B CN901
PIN201
5
1
FROM G RELAY-1 C.B CON201


7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
J772
REC/
LINE IN
L
R
PLAY/
LINE OUT
L
R
(ONLY FOR HE)
S802
AC VOLTAGE
120/220/240V
S802
WH802
(EXCEPT FOR HE)
<WHT>
<YEL>
<ORG>
<WHT>
(ONLY FOR HE)
<BLK>
<BLU>
<BRN>
AC120/
220/240
50/60HZ
(HE)
AC230V
50HZ (E)
AC240V
50HZ (K)
C810
S801
POWER
S801
PT801
IC601
IC602
Q801
Q802
Q803
Q806
D801
D805
D807
D814
IC855
IC852
IC851
IC853
IC301
IC202
IC201
CN851
1
18
FROM F FL C.B
CN901
PIN201
5
1
FROM G RELAY-1 C.B
CON211
(EXCEPT FOR HE)
(ONLY FOR HE)
<BLK>
<WHT>
<YEL>
<ORG>

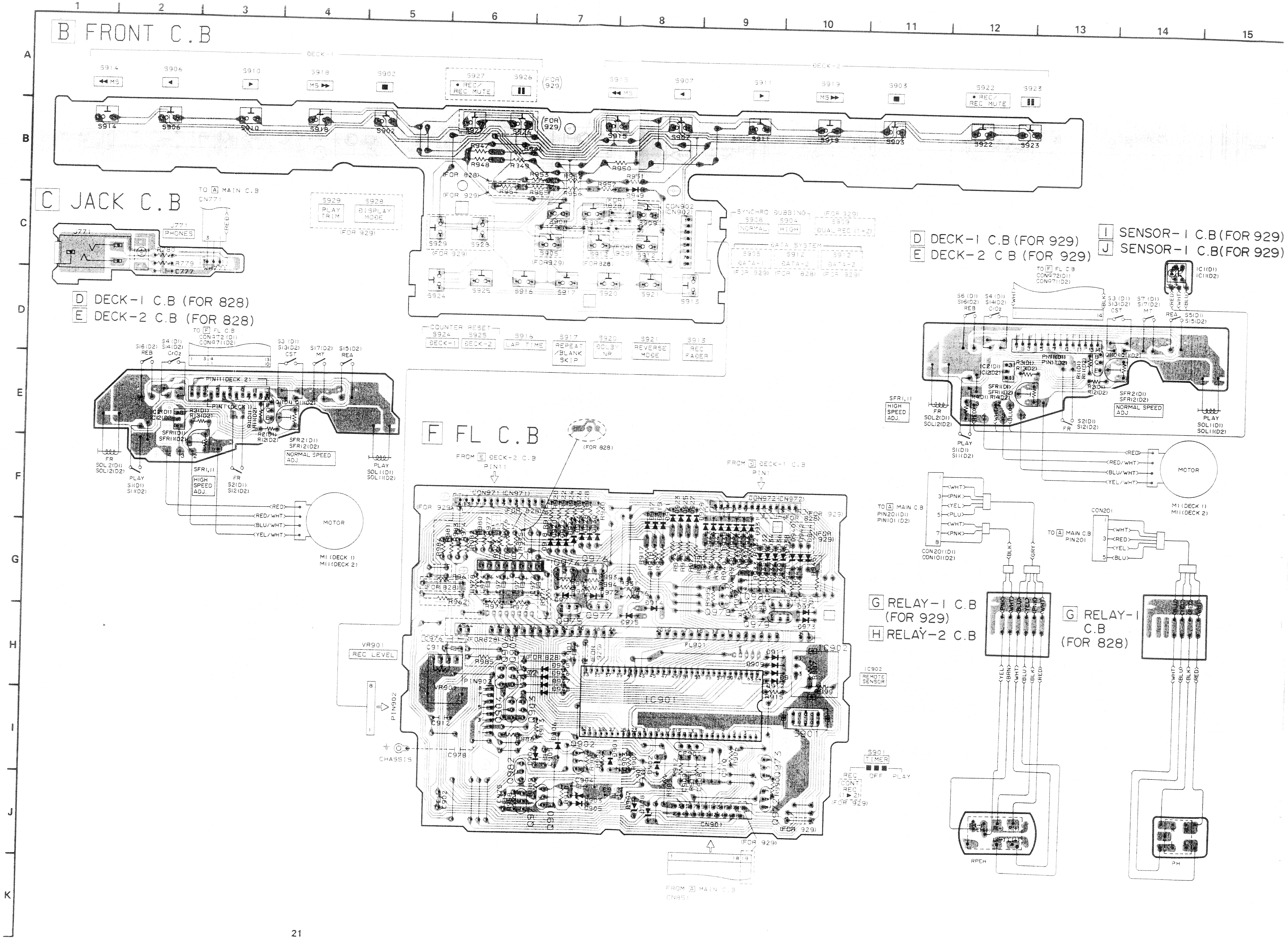
J POWER-2 C.B

I POWER-1 C.B

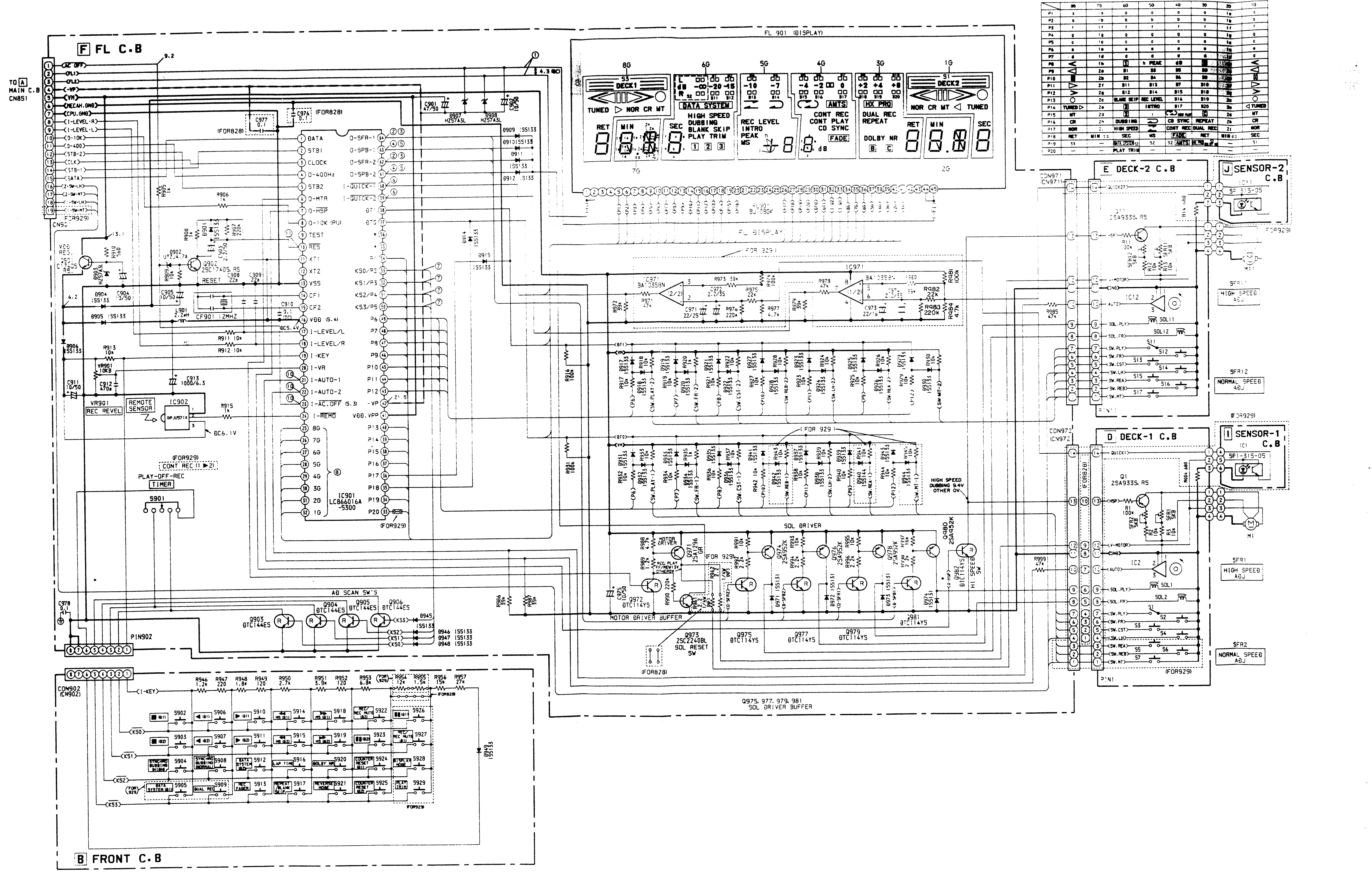
SCHEMATIC DIAGRAM – 2 (AD – WX828)



A MAIN C.B
2DECK PB AMP
HX PRO CONTROL
BIAS OSC
BIAS ADJ.
ERASE CURRENT
VOLTAGE SUPPLY
L301, L302
HX COIL ADJ
SFR301, 302
REC/PB FREQ ADJ
PB SELECT SW
FILTER 400HZ
MPX FILTER
SENS. ADJ. SW'S
MOTOR SPEED SW'S
IC601 DOLBY NR AND REC EQ AMP
HA12155NT-01
FILTER 10KHZ
HP BUFFER
INPUT BUFFER
LMT SW
LEVEL SHIFTER
C JACK C.B
PHONES
PLAY/LINE OUT
REC/LINE IN
TO F FL C.B CN901
IC851-853 SERIAL -PARALLEL CONVERTER
H RELAY-2 C.B
G RELAY-1 C.B
AZIMUTH ADJ
1DECK PB AMP
SFR201, 202 PB SENS ADJ
PB EQ SW
J POWER-2 C.B
I POWER-1 C.B
6 DEG HEAT SINK
200G HEAT SINK
-VP REG.
AC120/220/240V, 50/60HZ (HE)
AC230V, 50HZ (E)
AC240V, 50HZ (K)
POWER ON OFF
1SEC


B FRONT C.B
DECK-1
DECK-2
S914 ◀◀MS
S906 ◀
S910 ▶
S918 MS▶▶
S902 ■
S927 ● REC/REC MUTE
S926 ❙❙ (FOR 929)
S915 ◀◀MS
S907 ◀
S911 ▶
S919 MS▶▶
S903 ■
S922 ● REC/REC MUTE
S923 ❙❙
C JACK C.B
TO A MAIN C.B CN771
J771 PHONES
S929 PLAY TRIM
S928 DISPLAY MODE
(FOR 929)
SYNCHRO DUBBING
S908 NORMAL
S904 HIGH
(FOR 929) S972 DUAL REC (1→2)
DATA SYSTEM
S935 DATA-1 (FOR 929)
S914 DATA-2 (FOR 828)
S912 DATA-2 (FOR 929)
CON902 (CN902)
COUNTER RESET
S924 DECK-1
S925 DECK-2
S916 LAP TIME
S917 REPEAT /BLANK SKIP
S920 DOLBY NR
S921 REVERSE MODE
S913 REC FADER
D DECK-1 C.B (FOR 828)
E DECK-2 C.B (FOR 828)
TO F FL C.B CON972 (D1) CON971 (D2)
S16(D2) REB
S4(D1) S14(D2) CrO2
S3(D1) S13(D2) CST
S17(D2) MT
S15(D2) REA
SFR1,11 HIGH SPEED ADJ.
SFR2(D1) SFR12(D2) NORMAL SPEED ADJ.
FR SOL2(D1) SOL12(D2)
PLAY S1(D1) S11(D2)
FR S2(D1) S12(D2)
PLAY SOL1(D1) SOL11(D2)
MOTOR
M1 (DECK 1) M11 (DECK 2)
F FL C.B
FROM E DECK-2 C.B PIN11
FROM D DECK-1 C.B PIN1
(FOR 828)
VR901 REC LEVEL
PIN902
CHASSIS
FL901
IC901
IC902 REMOTE SENSOR
S901 TIMER REC OFF PLAY
REC CONT REC (1▶2) (FOR 929)
FROM A MAIN C.B CN851
D DECK-1 C.B (FOR 929)
E DECK-2 C.B (FOR 929)
I SENSOR-1 C.B (FOR 929)
J SENSOR-1 C.B (FOR 929)
IC1(D1) IC11(D2)
S6(D1) S16(D2) REB
S4(D1) S14(D2) CrO2
S3(D1) S13(D2) CST
S7(D1) S17(D2) MT
REA S5(D1) S15(D2)
SFR1,11 HIGH SPEED ADJ.
SFR2(D1) SFR12(D2) NORMAL SPEED ADJ.
FR SOL2(D1) SOL12(D2)
PLAY S1(D1) S11(D2)
FR S2(D1) S12(D2)
PLAY SOL1(D1) SOL11(D2)
TO A MAIN C.B PIN201(D1) PIN101(D2)
CON201(D1) CON101(D2)
CON201
TO A MAIN C.B PIN201
G RELAY-1 C.B (FOR 929)
H RELAY-2 C.B
G RELAY-1 C.B (FOR 828)
RPEH
PH
RED, RED/WHT, BLU/WHT, YEL/WHT, WHT, PNK, YEL, BLU, BRN, BLK, GRY

HEMATIC DIAGRAM – 3 (AD – WX929,AD – WX828)


F FL C.B
TO A MAIN C.B CN851
FL 901 (DISPLAY)
IC901 LC866016A -5300
IC971 BA10358N
AD SCAN SW'S
SOL DRIVER
MOTOR DRIVER BUFFER
Q975, 977, 979, 981 SOL DRIVER BUFFER
E DECK-2 C.B
J SENSOR-2 C.B
D DECK-1 C.B
I SENSOR-1 C.B
CON971 (CN971)
CON972 (CN972)
CON902 (CN902)
PIN902
B FRONT C.B
REMOTE SENSOR
VR901 REC REVEL
PLAY-OFF-REC TIMER
(FOR929) CONT REC (1 ▶ 2)
HIGH SPEED DUBBING 9.4V OTHER 0V
SFR1 HIGH SPEED ADJ
SFR2 NORMAL SPEED ADJ
SFR11 HIGH SPEED ADJ
SFR12 NORMAL SPEED ADJ
(FOR929)
(FOR828)

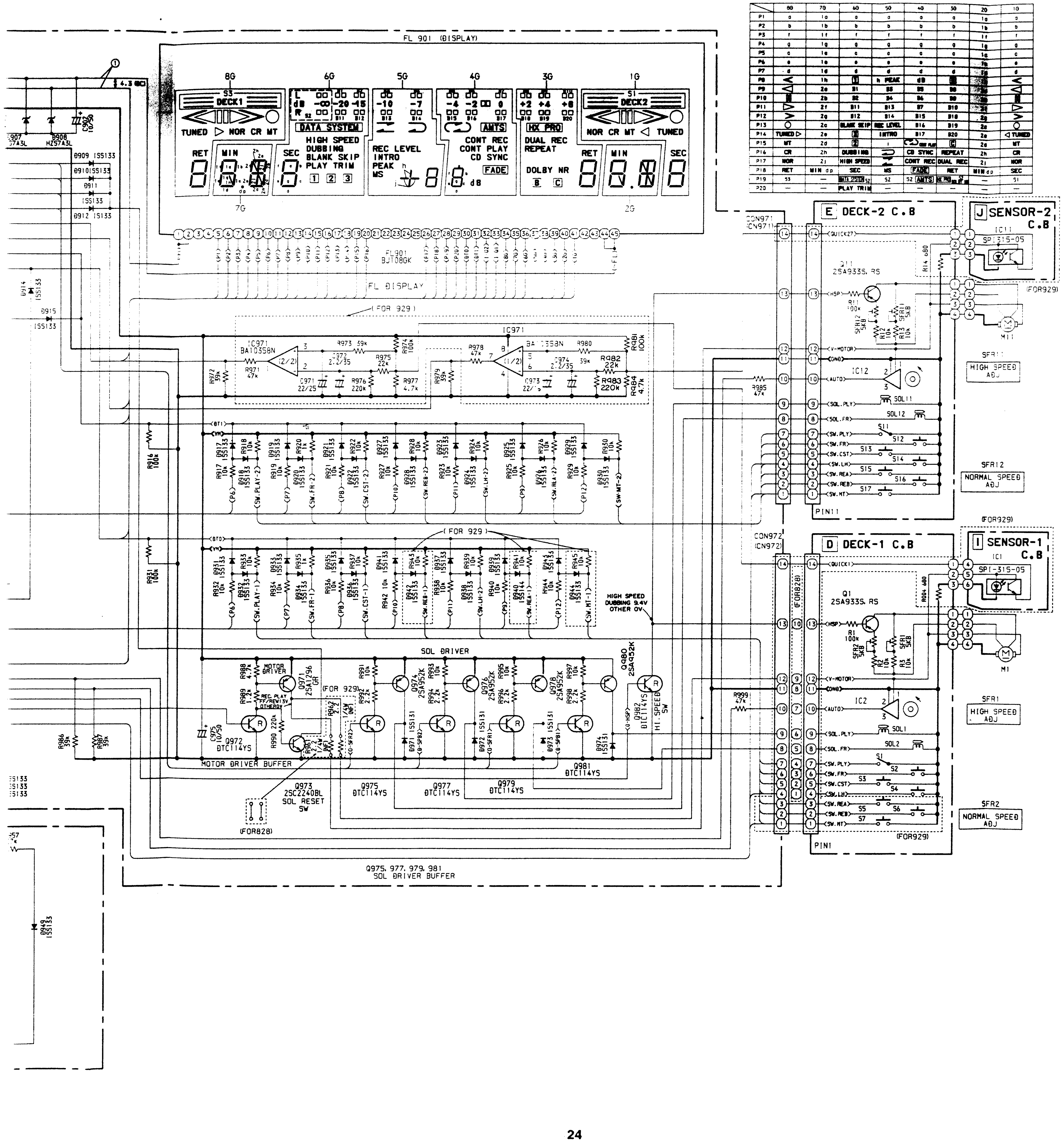
ANODE CONNECTION FL901

	8G	7G	6G	5G	4G	3G	2G	1G
P1	a	1a	a	a	a	a	1a	a
P2	b	1b	b	b	b	b	1b	b
P3	f	1f	f	f	f	f	1f	f
P4	g	1g	g	g	g	g	1g	g
P5	c	1c	c	c	c	c	1c	c
P6	e	1e	e	e	e	e	1e	e
P7	d	1d	d	d	d	d	1d	d
P8	<	1h	1	h PEAK	dB	■	[illegible]	<
P9	◁	2a	B1	B3	B5	B9	[illegible]	◁
P10	■	2b	B2	B4	B6	B8	[illegible]	■
P11	▷	2f	B11	B13	B7	B10	2f	▷
P12	>	2g	B12	B14	B15	B18	2g	>
P13	○	2c	BLANK SKIP	REC LEVEL	B16	B19	2c	○
P14	TUNED ▷	2e	3	INTRO	B17	B20	2e	◁ TUNED
P15	MT	2d	2	1	[illegible]	C	2d	MT
P16	CR	2h	DUBBING	[illegible]	CD SYNC	REPEAT	2h	CR
P17	NOR	2i	HIGH SPEED	[illegible]	CONT REC	DUAL REC	2i	NOR
P18	RET	MIN dp	SEC	MS	FADE	RET	MIN dp	SEC
P19	S3	—	DATA SYSTEM S2	S2	S2 AMTS	HX PRO	—	S1
P20	—	—	PLAY TRIM	—	—	—	—	—

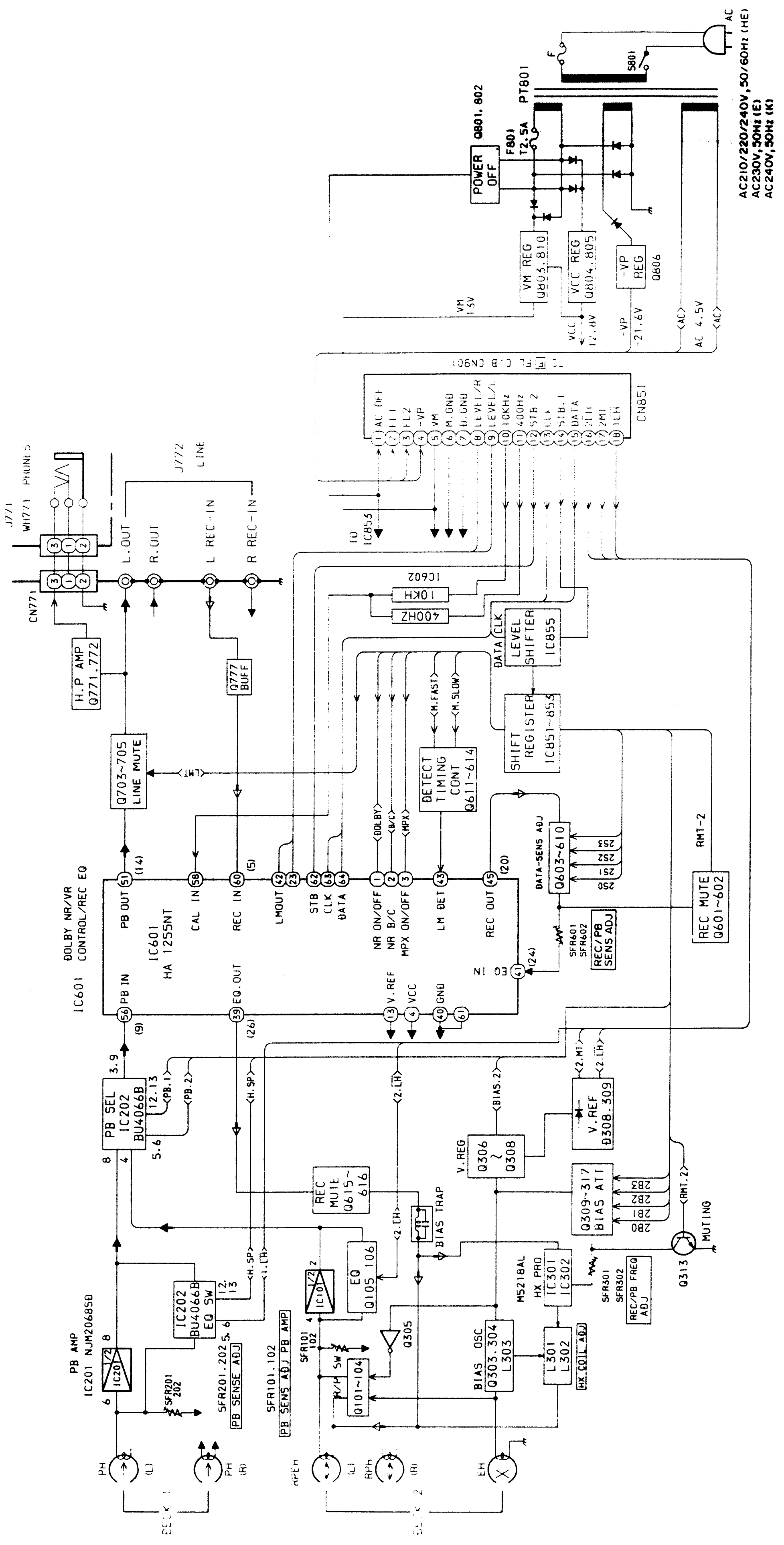
BLOCK DIAGRAM (AD – WX828)

ANODE CONNECTION FL901

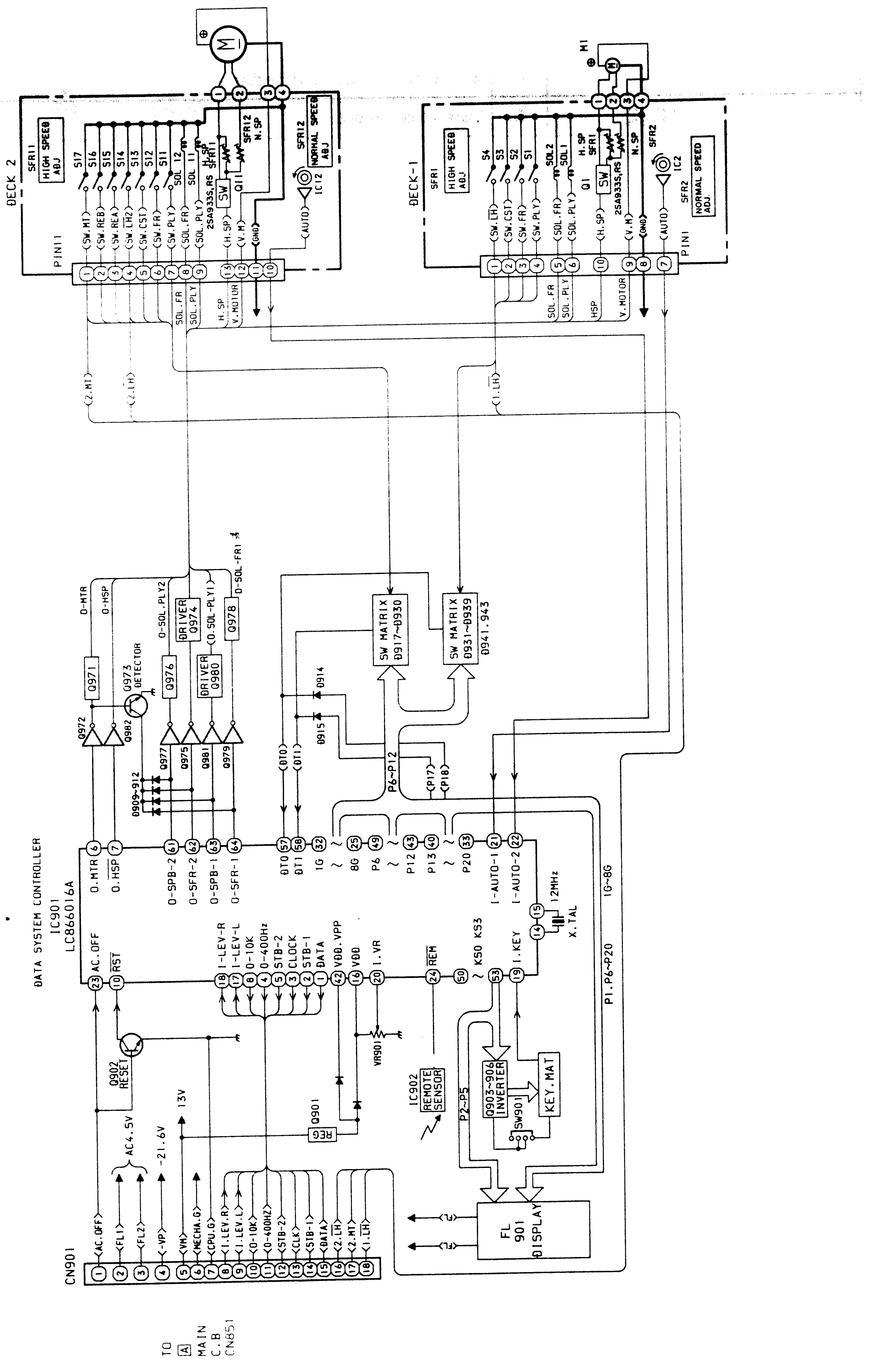
	8G	7G	6G	5G	4G	3G	2G	1G
P1	a	1a	a	a	a	a	1a	a
P2	b	1b	b	b	b	b	1b	b
P3	f	1f	f	f	f	f	1f	f
P4	g	1g	g	g	g	g	1g	g
P5	c	1c	c	c	c	c	1c	c
P6	e	1e	e	e	e	e	1e	e
P7	d	1d	d	d	d	d	1d	d
P8	<	1h	[3]	h PEAK	dB	[B]	1h	<
P9	◁	2a	B1	B3	B5	B8	2a	◁
P10	▮	2b	B2	B4	B6	B9	2b	▮
P11	▷	2f	B11	B13	B7	B10	2f	▷
P12	>	2g	B12	B14	B15	B18	2g	>
P13	○	2c	BLANK SKIP	REC LEVEL	B16	B19	2c	○
P14	TUNED ▷	2e	[1]	INTRO	B17	B20	2e	◁ TUNED
P15	MT	2d	[2]	i	↻ CONT PLAY	[C]	2d	MT
P16	CR	2h	DUBBING	⮌	CD SYNC	REPEAT	2h	CR
P17	NOR	2i	HIGH SPEED	⇄	CONT REC	DUAL REC	2i	NOR
P18	RET	MIN dp	SEC	MS	[FADE]	RET	MIN dp	SEC
P19	S3	—	[DATA SYSTEM] S2	S2	S2 [AMTS]	[HX PRO] S2 DOLBY NR	—	S1
P20	—	—	PLAY TRIM	—	—	—	—	—



FL 901 (DISPLAY)
8G
6G
5G
4G
3G
1G
7G
2G
S3
DECK1
S1
DECK2
TUNED ▷ NOR CR MT
NOR CR MT ◁ TUNED
RET MIN SEC
DATA SYSTEM
HIGH SPEED
DUBBING
BLANK SKIP
PLAY TRIM
REC LEVEL
INTRO
PEAK
MS
CONT REC
CONT PLAY
CD SYNC
AMTS
FADE
HX PRO
DUAL REC
REPEAT
DOLBY NR
FL901 BJ708GK
FL DISPLAY
(FOR 929)
IC971 BA10358N
CON971 (CN971)
CON972 (CN972)
E DECK-2 C.B
J SENSOR-2 C.B
IC11 SPI-315-05
Q11 2SA933S, RS
M11
SFR11 HIGH SPEED ADJ
SFR12 NORMAL SPEED ADJ
PIN11
D DECK-1 C.B
I SENSOR-1 C.B
IC1 SPI-315-05
Q1 2SA933S, RS
M1
SFR1 HIGH SPEED ADJ
SFR2 NORMAL SPEED ADJ
PIN1
(FOR828)
(FOR929)
HIGH SPEED DUBBING 9.4V OTHER 0V
SOL DRIVER
MOTOR DRIVER
Q971 2SA1296 GY
Q972 DTC114YS
Q973 2SC2240BL SOL RESET SW
Q974 2SA952K
Q975 DTC114YS
Q976 2SA952K
Q977 DTC114YS
Q978 2SA952K
Q979 DTC114YS
Q980 2SA952K
Q981 DTC114YS
Q982 DTC114YS
HI. SPEED SW
MOTOR DRIVER BUFFER
Q975, 977, 979, 981 SOL DRIVER BUFFER



POWER OFF Q801, 802
PT801
F801 T2.5A
S801
AC210/220/240V,50/60Hz (HE)
AC230V,50Hz (E)
AC240V,50Hz (K)
VM REG Q803, 810
VCC REG Q804, 805
-VP REG Q806
VM 15V
VCC 12.4V
-VP -21.6V
AC 4.5V
TO FL C.B CN901
CN851
J771 WH771 PHONES
J772 LINE
CN771
L.OUT
R.OUT
L REC-IN
R REC-IN
H.P AMP Q771, 772
Q777 BUFF
Q703~705 LINE MUTE
IC602
10KH
400Hz
DATA CLK
LEVEL SHIFTER IC855
SHIFT REGISTER IC851~855
DETECT TIMING CONT Q611~614
Q603~610 DATA-SENS ADJ
REC MUTE Q601~602
RMT-2
IC601 DOLBY NR/VR CONTROL/REC EQ
IC601 HA12155NT
SFR601 SFR602 REC/PB SENS ADJ
PB SEL IC202 BU4066B
REC MUTE Q615~616
BIAS TRAP
V.REG Q306 ~ Q308
V.REF Q308, 309
Q309~317 BIAS ATT
EQ Q105, 106
IC202 BU4066B EQ SW
PB AMP IC201 NJM2068SD
SFR201, 202 PB SENSE ADJ
SFR101, 102 PB SENS ADJ PB AMP
Q101~104
Q305
BIAS OSC Q303, 304 L303
M5218AL HX PRO IC301 IC302
L301 L302 HX COIL ADJ
SFR301 SFR302 REC/PB FREQ ADJ
Q313 MUTING
PH
RPH
EH


DECK 2
SFR11 HIGH SPEED ADJ
SFR12 NORMAL SPEED ADJ
S17
S16
S15
S14
S13
S12
S11
SOL 12
SOL 11
H.SP SFR11
SFR12 N.SP
SW
Q11
2SA933S,RS
IC12
PIN11
SW.MT
SW.REB
SW.REA
SW.LH2
SW.CST
SW.FR
SW.PLY
SOL.FR
SOL.PLY
H.SP
V.M
GND
AUTO
V.MOTOR
M
M1
DECK-1
SFR1 HIGH SPEED ADJ
SFR2 NORMAL SPEED ADJ
S4
S3
S2
S1
SOL2
SOL1
H.SP SFR1
N.SP
SFR2
IC2
Q1
2SA933S,RS
PIN1
SW.LH
SW.CST
SW.FR
SW.PLY
HSP
2.MT
2.LH
1.LH
DATA SYSTEM CONTROLLER
IC901
LC866016A
AC.OFF
RST
O.MTR
O.HSP
O-SPB-2
O-SFR-2
O-SPB-1
O-SFR-1
ƊT0
ƊT1
1G
8G
P6
P12
P13
P20
I-AUTO-1
I-AUTO-2
1G~8G
I-LEV-R
I-LEV-L
O-10K
O-400Hz
STB-2
CLOCK
STB-1
DATA
VDD.VPP
VDD
I.VR
REM
K50 K53
I.KEY
12MHz
X.TAL
P1.P6~P20
O-MTR
O-HSP
Q971
Q972
Q973 DETECTOR
Q982
O-SOL.PLY2
DRIVER Q974
O-SOL.PLY1
DRIVER Q980
Q976
Q978
O-SOL-FR1
Q977
Q975
Q981
Q979
D909~912
D914
D915
SW MATRIX D917~D930
SW MATRIX D931~D939 D941.943
P6~P12
P17
P18
Q902 RESET
Q901
REG
VR901
IC902 REMOTE SENSOR
P2~P5
Q903~906 INVERTER
SW901
KEY.MAT
FL 901 DISPLAY
FL
AC4.5V
-21.6V
13V
CN901
AC.OFF
FL1
FL2
VP
VM
MECHA.G
CPU.G
I.LEV.R
I.LEV.L
O-10K
O-400HZ
STB-2
CLK
STB-1
DATA
2.LH
2.MT
1.LH
TO A MAIN C.B CN851

IC DESCRIPTION

IC, LC866016A – 5300

Pin No.	Pin Name	I/O	Description
1	DATA	O	Serial data output.
2	STB1	O	Strobe output (for shift register).
3	CLOCK	O	Data clock output.
4	0 – 400Hz	O	400Hz oscillation output for data system.
5	STB2	O	Strobe output (for Dolby IC).
6	O – MTR	O	Mechanism motor control output.
7	$\overline{\text{O – HSP}}$	O	Motor speed switching output.
8	O – 10kHz	O	10kHz oscillation output for data system.
9	TEST1	–	System test pin, not connected.
10	$\overline{\text{RES}}$	I	System reset pin.
11	XT1	O	Sub-clock pin, connected to VDD.
12	XT2	I	Sub-clock pin, not connected.
13	VSS	–	System power supply pin, connected to GND.
14	CF1	O	System clock pins. A 12MHz ceramic clock oscillator is connected.
15	CF2	I	
16	VDD	–	System power supply pin, connected to +5V.
17	I – LEVEL • L	I	Lch meter input. AD converted to 8 bits internally.
18	I – LEVEL • R	I	Rch meter input. AD converted to 8 bits internally.
19	I – KEY	I	AD key scan input.
20	I – VR	I	Volume level detection.
21	I – AUTO1	I	Reel disk rotation pulse inputs for counter.
22	I – AUTO2	I	
23	$\overline{\text{I – AC • OFF}}$	I	Power off detection input.
24	$\overline{\text{I – REMO}}$	I	Serial data input for remote control.
25	G8	O	Grid outputs to drive the FL display. Lights at "H".
26	G7	O	
27	G6	O	
28	G5	O	
29	G4	O	
30	G3	O	
31	G2	O	
32	G1	O	

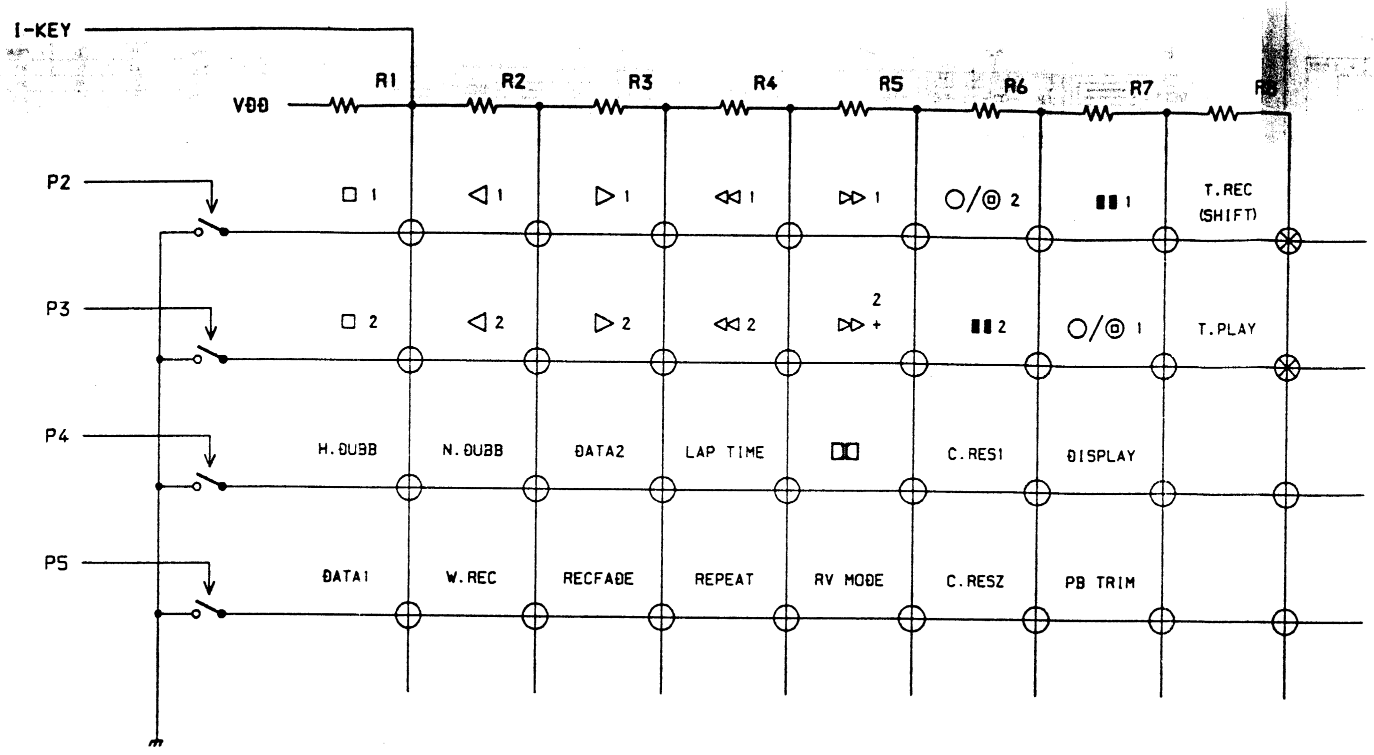
Pin No.	Pin Name	I/O	Description
33	P20	O	Segment outputs to drive the FL display. Lights at "H". P17 – P20 are also used to scan the operation mode during initialization.
34	P19	O	
35	P18	O	
36	P17	O	
37	P16	O	
38	P15	O	
39	P14	O	
40	P13	O	
41	VDDVPP	–	Power supply of FL display drive outputs. Connected to 5V.
42	VP	–	Negative power supply for pull-down resistors. – 27V is connected.
43	P12	O	Segment outputs to drive the FL display. Lights at "H". P2 – P12 are also used as the SW scan and AD scan outputs.
44	P11	O	
45	P10	O	
46	P9	O	
47	P8	O	
48	P7	O	
49	P6	O	
50	P5	O	
51	P4	O	
52	P3	O	
53	P2	O	
54	P1	O	
55	NC	–	Not used.
56	NC	–	
57	DT0	I	SW scan inputs.
58	DT1	I	
59	I – QUICK1	I	Quick sensor inputs.
60	I – QUICK2	I	
61	O – SOL • PL2	O	Outputs to control the plunger driver in the mechanism. The plunger is attracted at "H".
62	O – SOL • FR2	O	
63	O – SOL • PL1	O	
64	O – SOL • FR1	O	

Note : The initial output of P6 and P61 – P64 are set to "L" and others to "H" when reset.

KEY MATRIX

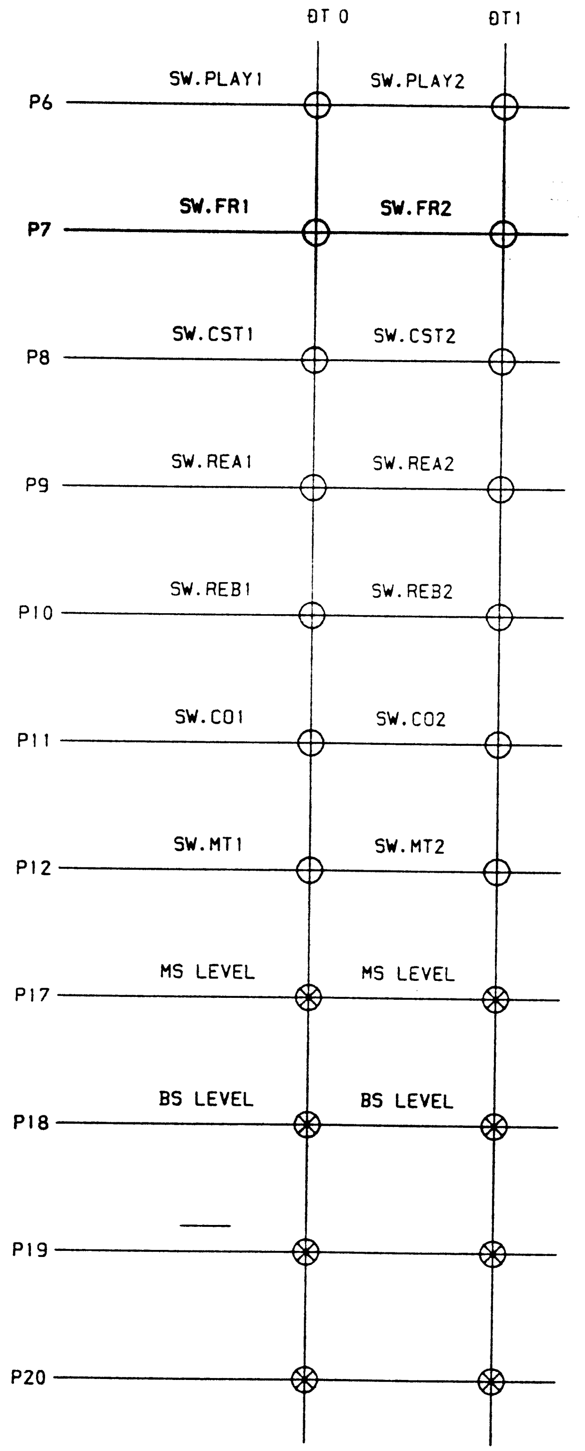
IC, LC866016A – 5300

KSCAN-AD MATRIX


I-KEY
VDD
R1
R2
R3
R4
R5
R6
R7
R8
P2
P3
P4
P5

	R1	R2	R3	R4	R5	R6	R7	R8
P2	□ 1	◁ 1	▷ 1	◁◁ 1	▷▷ 1	○/◎ 2	▮▮ 1	T.REC (SHIFT)
P3	□ 2	◁ 2	▷ 2	◁◁ 2	▷▷ 2 +	▮▮ 2	○/◎ 1	T.PLAY
P4	H.DUBB	N.DUBB	DATA2	LAP TIME	DD	C.RES1	DISPLAY	
P5	DATA1	W.REC	RECFADE	REPEAT	RV MODE	C.RESZ	PB TRIM	

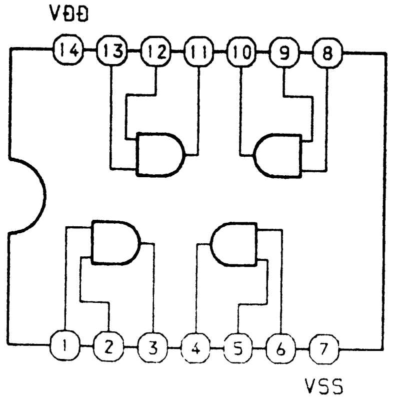
SEGMENT SCAN MATRIX



	DT 0	DT1
P6	SW.PLAY1	SW.PLAY2
P7	SW.FR1	SW.FR2
P8	SW.CST1	SW.CST2
P9	SW.REA1	SW.REA2
P10	SW.REB1	SW.REB2
P11	SW.CO1	SW.CO2
P12	SW.MT1	SW.MT2
P17	MS LEVEL	MS LEVEL
P18	BS LEVEL	BS LEVEL
P19	—	
P20		

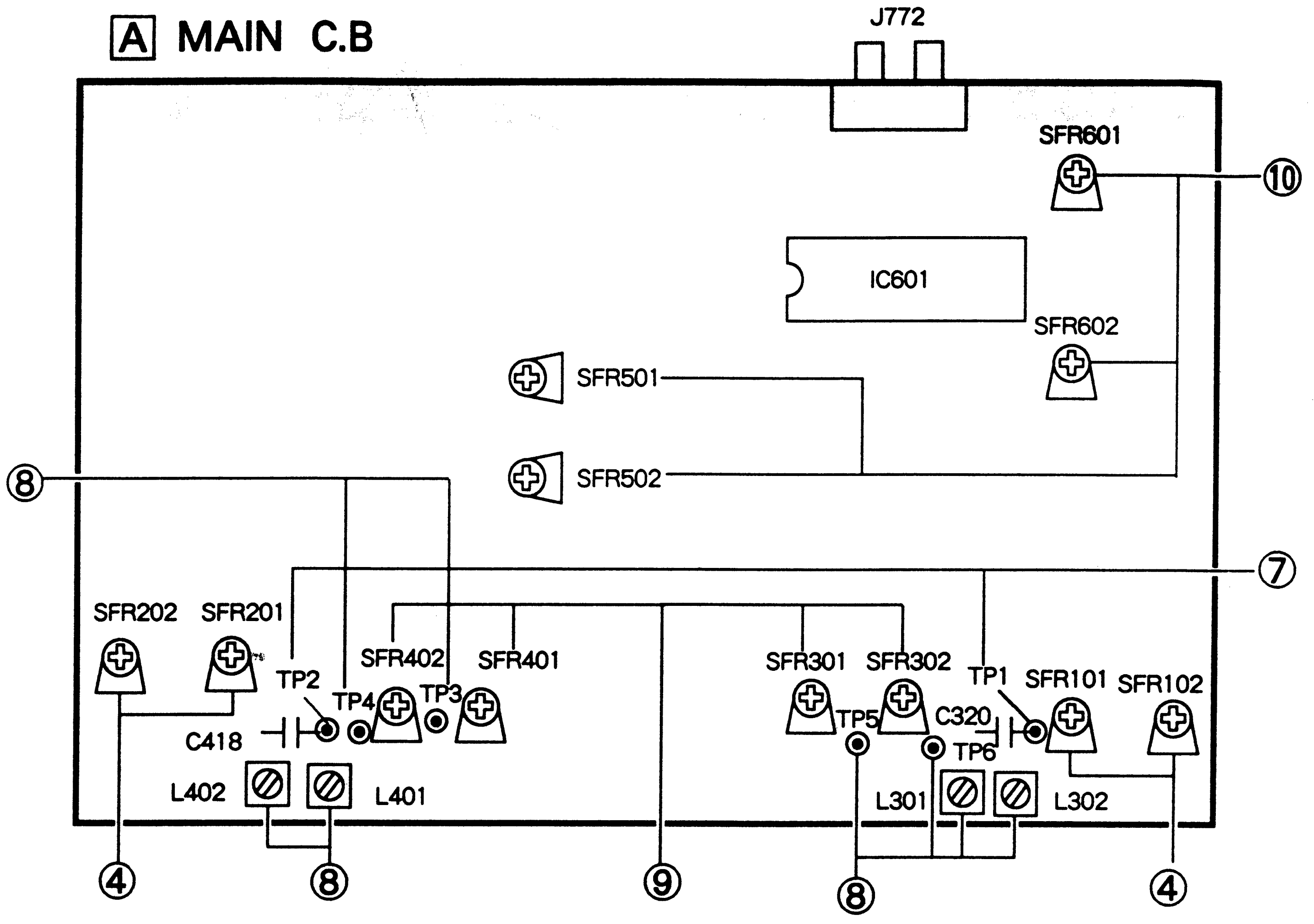
IC BLOCK DIAGRAM – 2

IC, TC4081BP


VDD
14
13
12
11
10
9
8
1
2
3
4
5
6
7
VSS

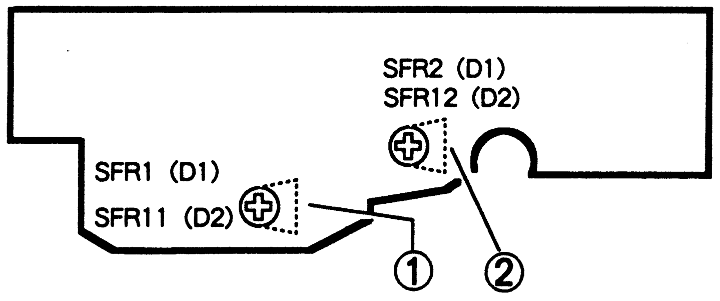
ADJUSTMENT – 1 (AD – WX929)
< DECK SECTION >

A MAIN C.B

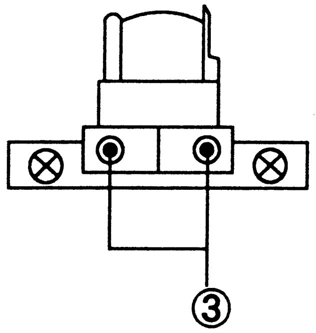


D DECK – 1 C.B
E DECK – 2 C.B

(TOP VIEW)



(DECK1, 2) R/P/E HEAD



1. High Speed Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA – 100 (TTA – 111S)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : SFR1 (DECK1)
SFR11 (DECK2)

Method : Play back the test tape, and adjust for 5980 ± 20Hz.

2. **Normal Speed Adjustment (DECK1, DECK2)**

Settings : • Test tape : TTA – 100 (TTA – 111S)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : SFR2 (DECK1)
SFR12 (DECK2)

Method : Play back the test tape, adjust for 3000Hz.

3. Head Azimuth Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA – 300 (TTA – 317E)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : Head azimuth adjustment screw

Method : Play back the 10kHz signal of test tape and adjust so that the output is maximum and the waveforms in the lissajours are in phase.

4. PB Sensitivity Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA – 200 (TTA – 161)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : SFR201 (DECK1, Lch)
SFR202 (DECK1, Rch)
SFR101 (DECK2, Lch)
SFR102 (DECK2, Rch)

Method : Play back the test tape, and adjust SFR so that the output level of the test point is 480mV.

5. PB Frequency Response Check (DECK1, DECK2)

Settings : • Test tape : TTA – 300 (TTA – 317E)
• Test point : LINE OUT (PIN JACK)

Method : Play back the 315Hz and 10kHz signals of the test tape and check the output of the 10kHz signalis 0dB ± 2dB with respect to that of the 315Hz signal.

6. Level Meter Check (DECK1, DECK2)

Settings : • Test tape : TTA – 200 (TTA – 161)

Method : Play back the test tape, and check that the reading of the level meter is light on – 4dB. After check the FL goer out the level by + 2dB.

7. Bias Frequency Check (DECK1, DECK2)

Settings : • Test tape : TTA – 630
• Test point : TP1,TP2

Method : Set to the record mode, and check so that the frequency counter of the test point reads 85kHz ± 3kHz.

8. HX Coil Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA – 630
• Test point : TP3, TP4, TP5, TP6
• Adjustment Location : (DECK1)
L401 (Lch), L402 (Rch)
(DECK2)
L301 (Lch), L302 (Rch)

Method : Adjust L401, L402 and L301, L302 so that the DC voltage at the test points is minimum in the record mode.

9. REC/PB Frequency Adjustment (DECK1, DECK2)

Settings : • Test tape : TTA – 601 (TTA – 630)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : (DECK1)
SFR401 (Lch)
SFR402 (Rch)
(DECK2)
SFR301 (Lch)
SFR302 (Rch)

Method : Apply a 1kHz signal and adjust REC LEVEL VR attenuater so that the output level at the LINE OUT jack is 48mV.
Record and playback the 1kHz and 10kHz signals and adjust so that the output of the 10kHz signal is 0dB ± 0.5dB with respect to that of the 1kHz signal.

10. REC/PB Sensitivity Adjustment (DECK1, DECK2)

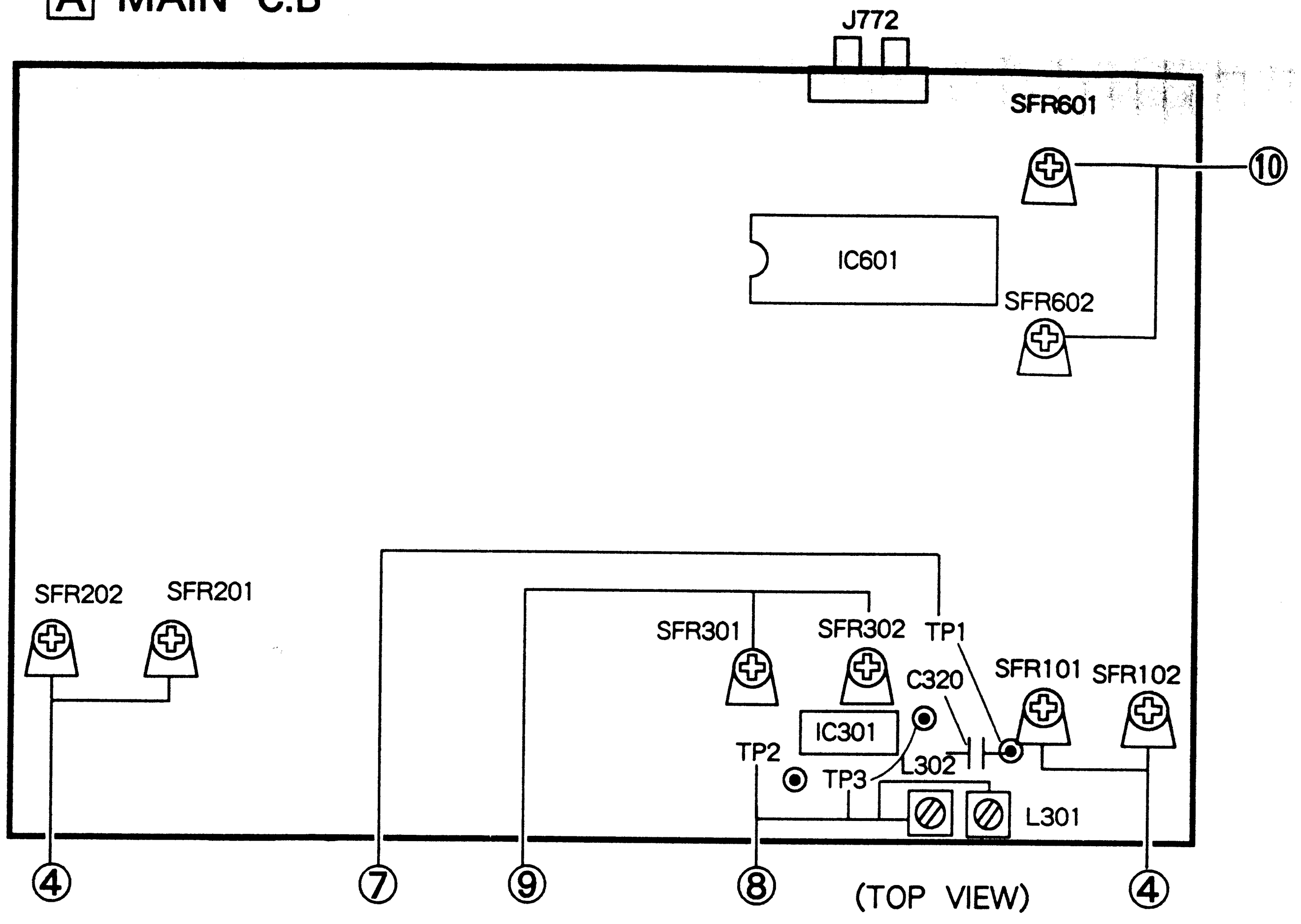
Settings : • Test tape : TTA – 601 (TTA – 630)
• Test point : LINE OUT (PIN JACK)
• Adjustment Location : (DECK1)
SFR501 (Lch)
SFR502 (Rch)
(DECK2)
SFR601 (Lch)
SFR602 (Rch)

Method : Apply a 1kHz signal and adjust REC LEVEL VR so that the output level at the LINE OUT is 48mV.
Record and playback the 1kHz signal and adjust so that the output is 48mV ± 0.5dB.

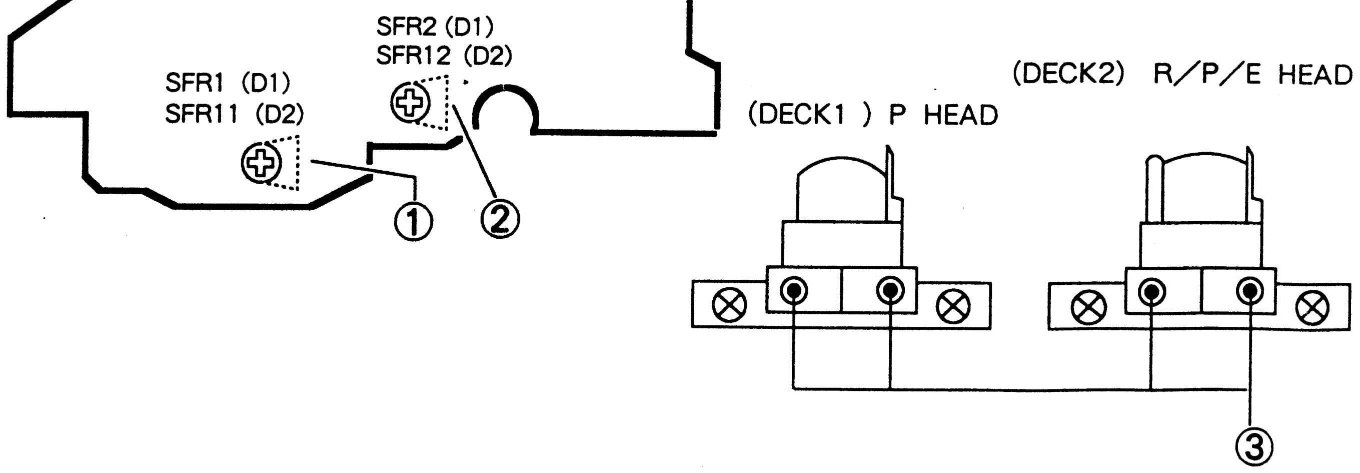
ADJUSTMENT – 2 (AD – WX828)

< DECK SECTION >

A MAIN C.B



D DECK – 1 C.B
E DECK – 2 C.B



1. High Speed Adjustment (DECK1, DECK2)

   Settings : • Test tape : TTA – 100 (TTA – 111S)
   • Test point : LINE OUT (PIN JACK)
   • Adjustment Location : SFR1 (DECK1)
   SFR11 (DECK2)

   Method : Play back the test tape, and adjust for 5980 ± 20Hz.

2. Normal Speed Adjustment (DECK1, DECK2)

   Settings : • Test tape : TTA – 100 (TTA – 111S)
   • Test point : LINE OUT (PIN JACK)
   • Adjustment Location : SFR2 (DECK1)
   SFR12 (DECK2)

   Method : Play back the test tape, adjust for 3000Hz.

3. Head Azimuth Adjustment (DECK1, DECK2)

   Settings : • Test tape : TTA – 300 (TTA – 317E)
   • Test point : LINE OUT (PIN JACK)
   • Adjustment Location : Head azimuth adjustment screw

   Method : Play back the 10kHz signal of test tape and adjust so that the output is maximum and the waveforms in the lissajours are in phase.

4. PB Sensitivity Adjustment (DECK1, DECK2)

   Settings : • Test tape : TTA – 200 (TTA – 161)
   • Test point : LINE OUT (PIN JACK)
   • Adjustment Location : SFR201 (DECK1, Lch)
   SFR202 (DECK1, Rch)
   SFR101 (DECK2, Lch)
   SFR102 (DECK2, Rch)

   Method : Play back the test tape, and adjust SFR so that the output level of the test point is 480mV.

5. PB Frequency Response Check (DECK1, DECK2)

   Settings : • Test tape : TTA – 300 (TTA – 317E)
   • Test point : LINE OUT (PIN JACK)

   Method : Play back the 315Hz and 10kHz signals of the test tape and check the output of the 10kHz signalis 0dB ± 2dB with respect to that of the 315Hz signal.

6. Level Meter Check (DECK1, DECK2)

   Settings : • Test tape : TTA – 200 (TTA – 161)

   Method : Play back the test tape, and check that the reading of the level meter is light on – 2dB.

7. Bias Frequency Check (DECK2)

   Settings : • Test tape : TTA – 630
   • Test point : TP1

   Method : Set to the record mode, and check so that the frequency counter of the test point reads 85kHz ± 3kHz.

8. HX Coil Adjustment (DECK1, DECK2)

   Settings : • Test tape : TTA – 630
   • Test point : TP2, TP3
   • Adjustment Location : L301 (Lch)
   L302 (Rch)

   Method : Adjust L301, L302 so that the DC voltage at the test points is minimumin the record mode.

9. REC/PB Frequency Adjustment (DECK2)

   Settings : • Test tape : TTA – 601 (TTA – 630)
   • Test point : LINE OUT (PIN JACK)
   • Adjustment Location : (DECK2)
   SFR301 (Lch)
   SFR302 (Rch)

   Method : Apply a 1kHz signal and adjust REC LEVEL VR attenuater so that the output level at the LINE OUT jack is 48mV.
   Record and playback the 1kHz and 10kHz signals and adjust so that the output of the 10kHz signal is 0dB ± 0.5dB with respect to that of the 1kHz signal.

10. REC/PB Sensitivity Adjustment (DECK2)

    Settings : • Test tape : TTA – 601 (TTA – 630)
    • Test point : LINE OUT (PIN JACK)
    • Adjustment Location : (DECK2)
    SFR601 (Lch)
    SFR602 (Rch)

    Method : Apply a 1kHz signal and adjust REC LEVEL VR so that the output level at the LINE OUT is 48mV.
    Record and playback the 1kHz signal and adjust so that the output is 48mV ± 0.5dB.

PRACTICAL SERVICE FIGURE (AD – WX929)

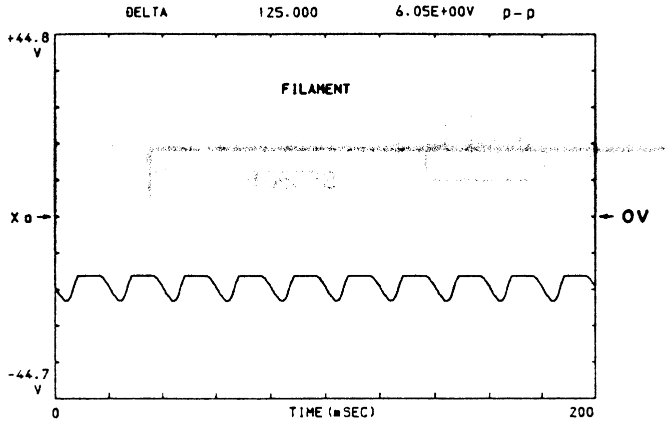
Playback output Level : 480mV ± 0.5dB
(TTA-200)(TTA-161, TCC-130) (LINE OUT)
REC/PB output : 0VU ± 1dB
(TTA-601) (LINE OUT)
REC/PB distortion : Less than 2%
(NORM.,CrO_2,MT)
Playback noise : Less than 4.0/3.5mV
(120 μs/70 μs, DOLBY NR OFF)
Less than 1.8/1.5mV
(120 μs/70 μs, DOLBY NR B, C)
Erase ratio (125Hz) : More than 58dB
Crosstalk : More than 60dB
Channel separation : More than 30dB
Level drift : Within 1.5dB
(10kHz, TTA-300)
DOLBY EFFECT : More than8.5dB
(TTA – 610) (DOLBY NR B)
More then17dB
(DOLBY NR C)
REC/PB S/N ratio : Less than 4.0/3.5mV
(LINEAR) (DOLBY NR OFF NORM./MT,CrO_2)
Less than 1.8/1.5mV
(DOLBY NR B, C NORM./MT,CrO_2)
Recording bias frequency: 85kHz
Tape speed : 3kHz ± 1.5%
Wow & flutter : Less than 0.08%
(W.R.M.S) (FWD)
Take-up torque : 30~55g-cm
Fast forward torque : 75~150g-cm
Rewind torque : 75~150g-cm
Back-tension : 2~6g-cm
Test tape : METAL TTA-630
CrO_2 TTA-610
(TTA-119H)
NORMAL TTA-601

PRACTICAL SERVICE FIGURE (AD – WX828)

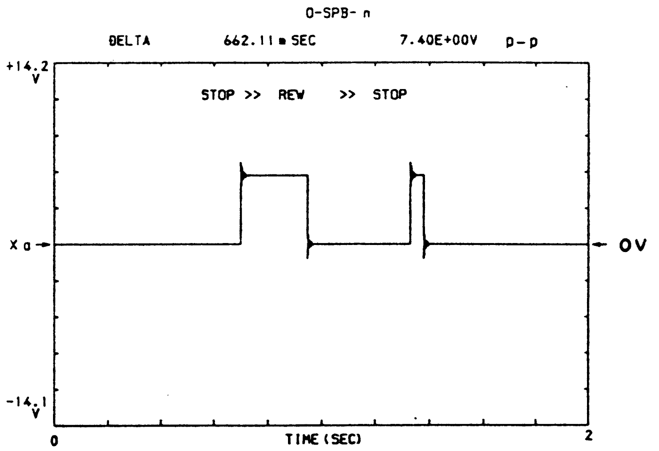
Playback output Level : 480mV ± 0.5dB
(TTA-200)(TTA-161, TCC-130) (LINE OUT)
REC/PB output : 0VU ± 1dB
(TTA-601) (LINE OUT)
REC/PB distortion : Less than 2.5% (NORM.,CrO_2)
Less than 3.0% (MT)
Playback noise : Less than 4.0/3.5mV
(120 μs/70 μs, DOLBY NR OFF)
Less than 1.8/1.5mV
(120 μs/70 μs, DOLBY NR B, C)
Erase ratio (125Hz) : (DECK – 2)
More than 58dB
Crosstalk : More than 60dB
Channel separation : More than 30dB
Level drift : Within 1dB
(10kHz, TTA-300)
DOLBY effect : More than8.5dB
(TTA – 610) (DOLBY NR B)
More then17dB
(DOLBY NR C)
REC/PB S/N ratio : Less than 4.0/3.5mV
(LINEAR) (DOLBY NR OFF NORM./MT,CrO_2)
Less than 1.8/1.5mV
(DOLBY NR B, C NORM./MT,CrO_2)
Recording bias frequency: (DECK – 2)
85kHz
Tape speed : 3kHz ± 1.5%
Wow & flutter : Less than 0.08%
(W.R.M.S) (FWD)
Take-up torque : 30~55g-cm
Fast forward torque : 70~150g-cm
Rewind torque : 70~150g-cm
Back-tension : 2~6g-cm
Test tape : METAL TTA-630
CrO_2 TTA-610
(TTA-119H)
NORMAL TTA-601

WAVE FROM

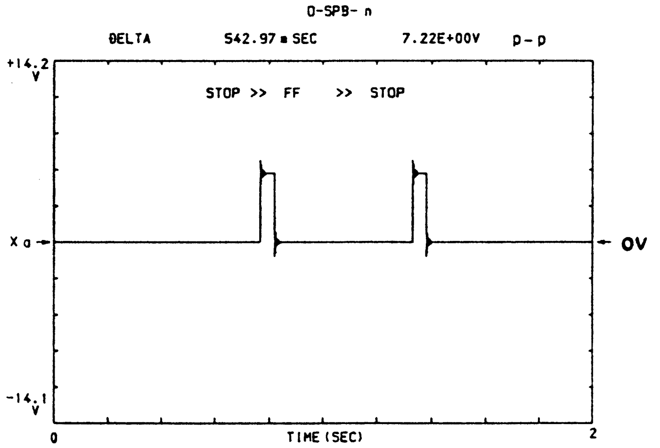
① FL901 PIN ①, ②, ㊹, ㊺



② IC901 PIN (62), (64)



③ IC901 PIN (62), (64)



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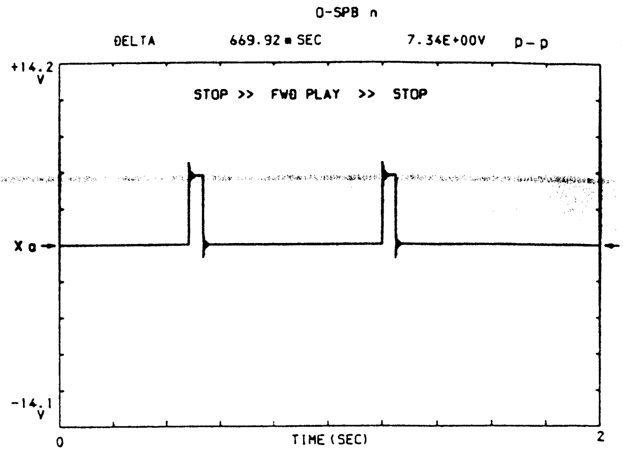
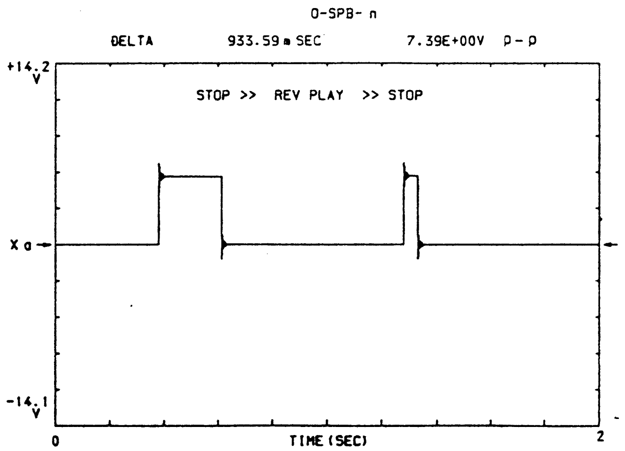
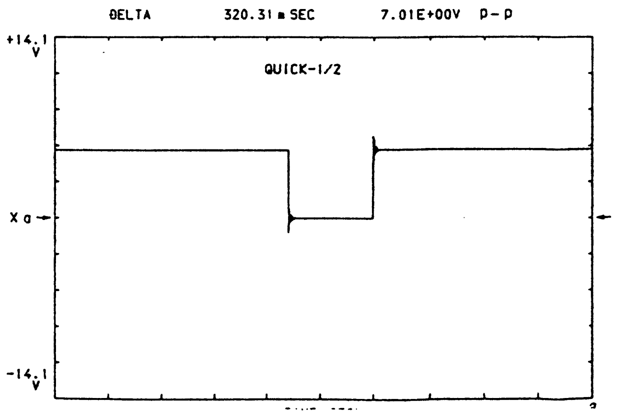


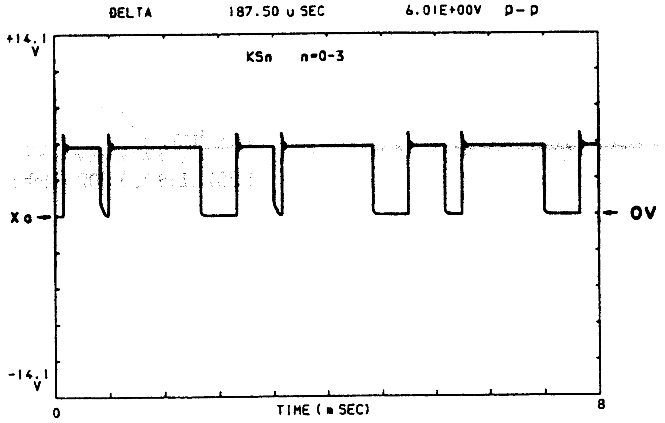
⑤ IC901 PIN (61), (63)



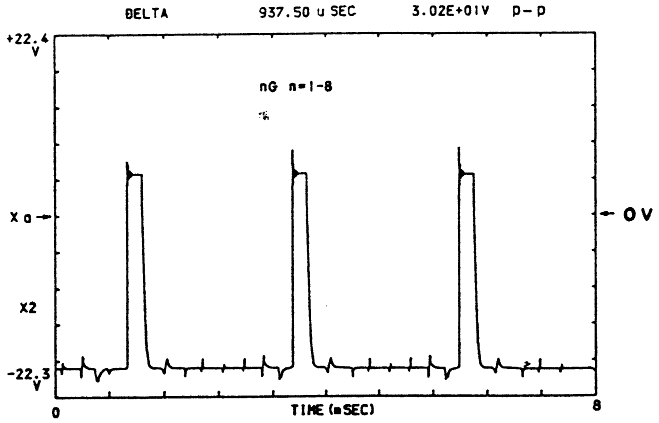
⑥ IC901 PIN (59), (60)



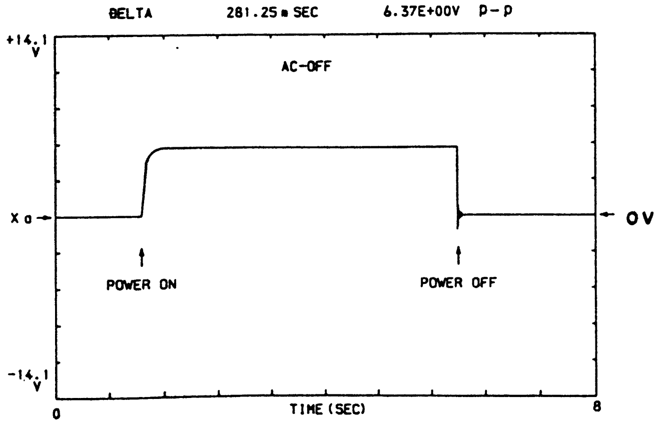
⑦ IC901 PIN ㊿, (51), (52), (53)



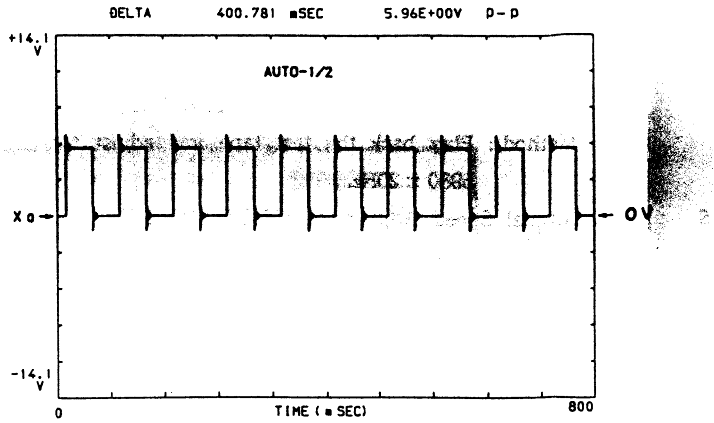
⑧ IC901 PIN ㉕ ~(32)



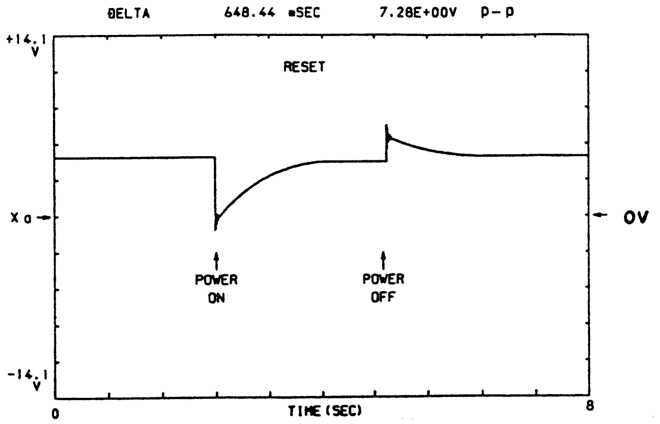
⑨ IC901 PIN ㉓



⑩ IC901 PIN ㉑, ㉒

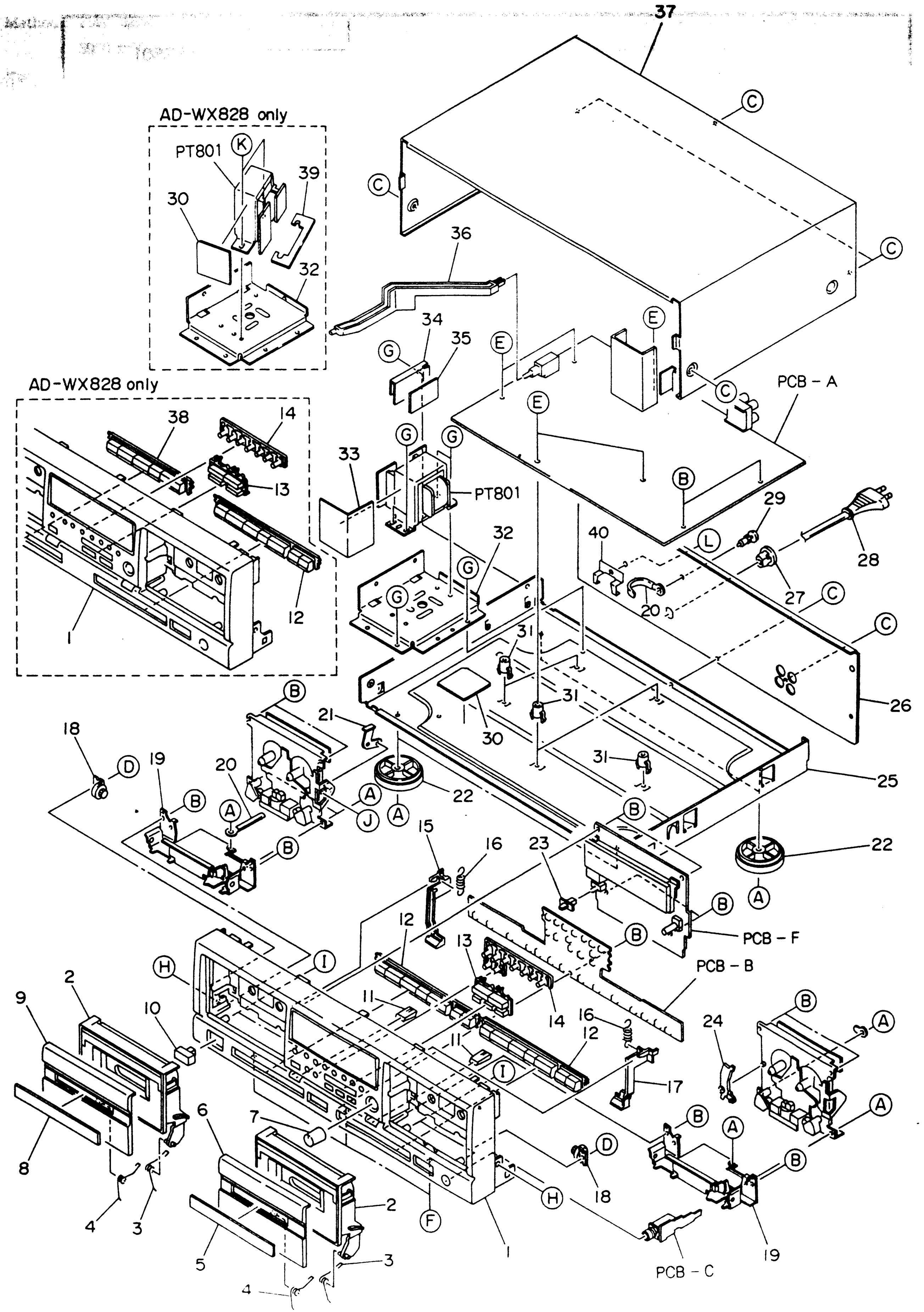


⑪ IC901 PIN ⑩



EXPLODED VIEW − 1 (AD − WX929,AD − WX828)

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	87-067-584-010	BVT$_2$+3-6	E	87-067-698-010	BVT$_2$+3-18 W/O SLOT	I	87-067-978-010	VFT$_1$+3-8 DIA10 BLK
B	87-067-579-010	BVT$_2$+3-8 W/O SLOT	F	87-067-777-010	BVTT+3-6 W, CONVEX BLK	J	87-067-977-010	S-SCREW+2.6-2.5
C	87-067-660-010	BVT$_2$+3-8 W/O SLOT BLK	G	87-067-585-010	BVTT+4-6	K	87-067-586-010	BVTT+4-8
D	87-067-703-010	BVT$_2$+3-10 W/O SLOT	H	87-591-094-410	QIT+3-6	L	87-253-094-419	U+3-6 BLK


37
AD-WX828 only
PT801
Ⓚ
39
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32
36
Ⓒ
AD-WX828 only
38
14
13
12
1
34
35
Ⓖ
Ⓔ
33
PT801
32
PCB − A
Ⓑ
29
28
40
Ⓛ
27
20
26
25
31
30
22
Ⓐ
Ⓙ
18
Ⓓ
19
21
15
16
23
PCB − F
PCB − B
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24
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2
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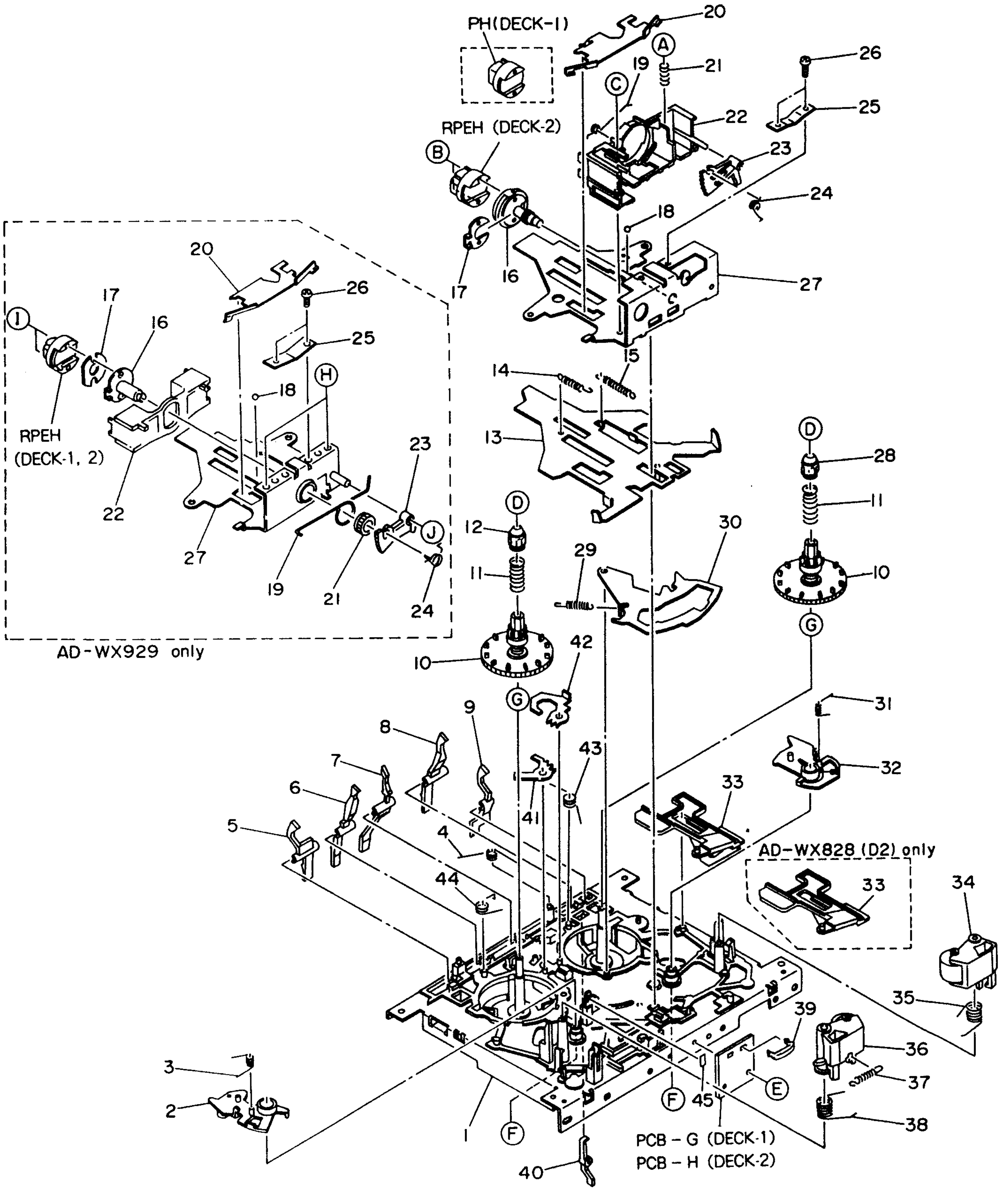
Ⓕ
PCB − C

MECHANICAL PARTS LIST (AD – WX929,AD – WX828)

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
	1-1	★09-047-738-010	CAB FR ASSY(WX828)	*	1
	1-1	★09-047-739-010	CAB FRONT ASSY(WX929)	*	1
	1-2	★09-047-508-010	CASS BOX ASSY	*	2
	1-3	★82-DW1-213-010	SPR-T, EJECT 2(E, K)	*	2
	1-3	★82-DW1-218-019	SPR-T, EJECT 2(HE, EN, KN)	*	2
	1-4	★82-DW1-212-010	SPR-T, EJECT 1(E, K)	*	2
	1-4	★82-DW1-217-019	SPR-T, EJECT 1(HE, EN, KN)	*	2
	1-5	★82-DW1-016-019	WINDOW, C-BOX R	*	1
	1-6	★82-DW2-007-019	PANEL, C-BOX 2R(WX828)	*	1
	1-6	★82-DW1-011-019	PANEL, C-BOX 1R(WX929)	*	1
	1-7	★82-DW1-007-019	KNOB, VOL	*	1
	1-8	★82-DW1-013-019	WINDOW, C-BOX L	*	1
	1-9	★82-DW2-006-019	PANEL, C-BOX 2L(WX828)	*	1
	1-9	★82-DW1-010-019	PANEL, C-BOX 1L(WX929)	*	1
	1-10	★82-AA1-016-019	BTN, POWER		1
	1-11	★82-DW1-008-019	BTN, EJECT	*	2
	1-12	★82-DW1-004-019	KEY, PLAY 1(WX828)	*	1
	1-12	★82-DW1-004-019	KEY, PLAY 1(WX929)	*	2
	1-13	★82-DW2-003-019	KEY, DUBB 2(WX828)	*	1
	1-13	★82-DW1-005-019	KEY, DUBB 1(WX929)	*	1
	1-14	★82-DW2-004-019	KEY, DOLBY 2(WX828)	*	1
	1-14	★82-DW1-006-019	KEY, DOLBY 1(WX929)	*	1
	1-15	★82-DW1-202-010	LVR, EJECT L	*	1
	1-16	★82-DW1-214-010	SPR-E, LVR(E, K)	*	2
	1-16	★82-DW1-219-019	SPR-E, LVR(HE, EN, KN)	*	2
	1-17	★82-DW1-203-010	LVR, EJECT R	*	1
	1-18	★87-063-143-010	OIL-DMPR 75		2
	1-19	★82-DW1-204-010	HLDR, MECHA	*	2
	1-20	---	WIRE BINDER(WX929)		2
	1-21	★82-DW1-215-010	LVR, PROTECT R-2	*	1
	1-22	★82-AA1-029-010	FOOT		4
	1-23	★82-DW1-017-019	KNOB, SLIDE	*	1
	1-24	★80-DW1-206-019	LVR, EJECT ST	*	1
	1-25	---	CHAS, MAIN		1
	1-26	★82-DW2-014-019	PANEL, REAR 2-E(WX828 E)	*	1
	1-26	★82-DW2-015-019	PANEL, REAR 2-K(WX828 K)	*	1
	1-26	★82-DW2-016-019	PANEL, REAR 2-HEJN(WX828 HE)	*	1
	1-26	★82-DW2-001-019	PANEL, REAR 2-EN(WX828 EN)	*	1
	1-26	★82-DW2-011-019	PANEL, REAR 2-KN(WX828 KN)	*	1
	1-26	★82-DW1-024-019	PANEL, REAR 1-E(WX929 E)	*	1
	1-26	★82-DW1-025-019	PANEL, REAR 1-K(WX929 K)	*	1
	1-26	★82-DW1-027-019	PANEL, REAR 1-HEJN(WX929 HE)	*	1
	1-26	★82-DW1-003-019	PANEL, REAR 1-EN(WX929 EN)	*	1
	1-26	★82-DW1-021-019	PANEL, REAR 1-KN(WX929 KN)	*	1
	1-27	★87-085-185-010	BUSHING, AC CORD		1
	1-28	★82-187-796-019	AC CORD(K)		1
	1-28	★82-187-797-019	AC CORD(HE, E)		1
	1-29	★87-084-077-010	NYLON RIVET DIA 3.5 - 4.5(WX929)		1
	1-30	★82-231-615-010	SILICON BOARD 43-43		1
	1-31	★81-670-214-010	HOLDER, PCB		5
	1-32	---	HLDR, PT	*	1
	1-33	★84-117-637-010	PLATE, SHIELD PT(WX929)		1
	1-34	★82-DW1-222-110	COVER, PT(WX929)	*	1
	1-35	★82-DW1-223-010	SH, PT(WX929)	*	1
	1-36	★82-DW1-207-010	ROD, POWER	*	1
	1-37	★82-DW1-002-019	CAB, STEEL	*	1
	1-38	★82-DW2-002-019	KEY, PLAY 2(WX828)	*	1
	1-39	---	PLATE, PT(WX828)		1
	1-40	★80-DS3-208-019	HLDR, VS2(HE)		1

EXPLODED VIEW – 2 (AD – WX929,AD – WX828)

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
A	86-575-363-210	S-SCREW V+2-8	E	87-067-174-010	VTT+2-4	I	87-067-177-010	V+1.6-5.5
B	80-ZM6-207-010	V+1.6-7	F	80-ZM6-250-010	PW4.8-8.5-0.13	J	87-081-489-010	PW1.7-3.5-0.25
C	87-263-033-110	V+2-4	G	87-067-825-010	PW4.1-6.9-0.25			
D	86-524-418-010	VFT$_2$+1.4-5	H	86-575-236-010	S-SCREW TAPE ADJ			



PH(DECK-1)
RPEH (DECK-2)
RPEH
(DECK-1, 2)
AD-WX929 only
AD-WX828 (D2) only
PCB – G (DECK-1)
PCB – H (DECK-2)
A
B
C
D
E
F
G
H
I
J
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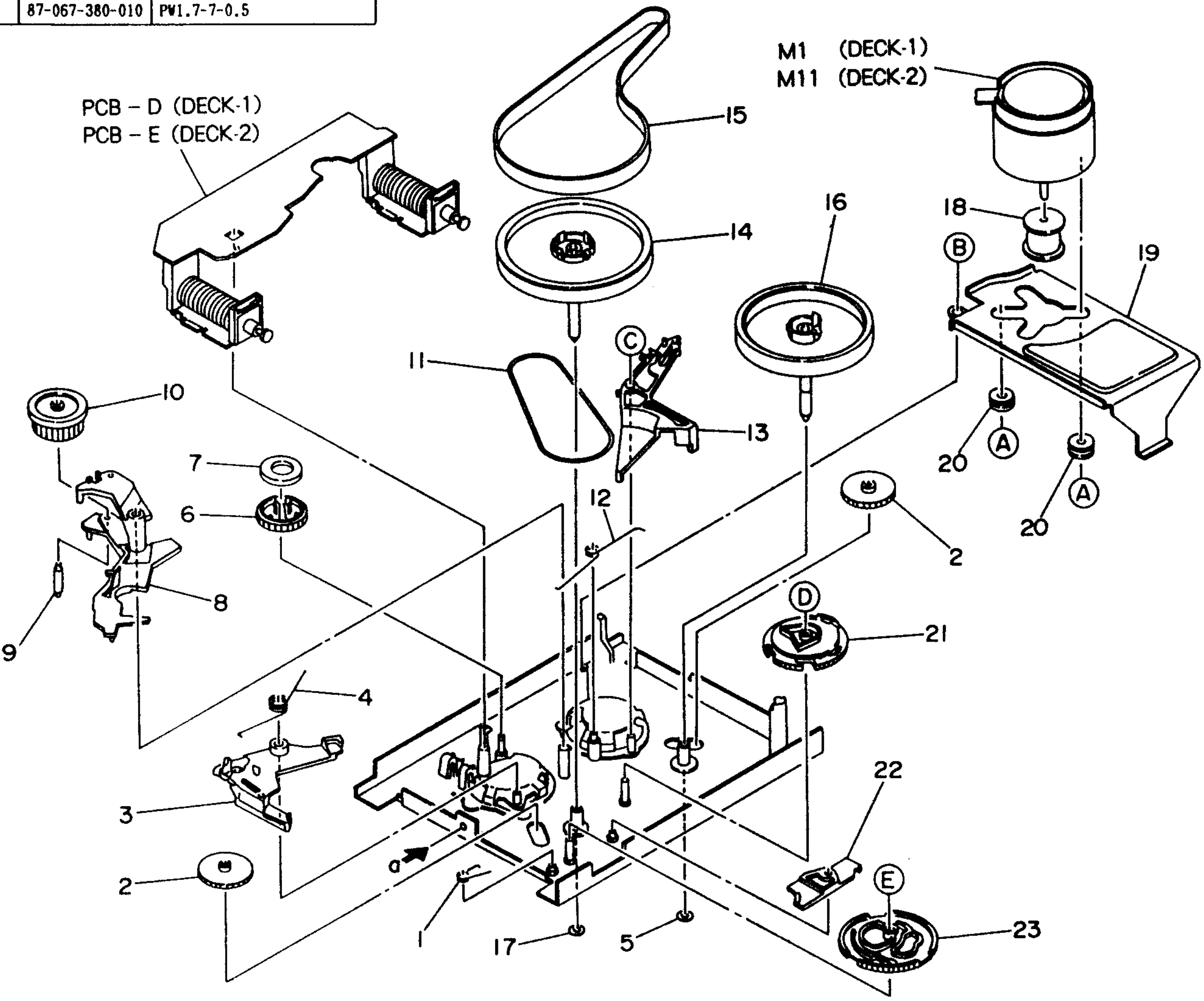
PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
	2-1	★86-575-407-010	MECHANISM CHASSIS ASSY	*	1
	2-2	★86-535-239-110	LEVER, PLAY R		1
	2-3	★86-535-283-010	T-SPRING, PLAY GEAR R		1
	2-4	★80-ZM6-206-010	T-SPRING CASSETTE		1
	2-5	★86-575-322-110	LEVER, REC A (D2)	*	1
	2-6	★86-575-325-210	LEVER, METAL (D2)	*	1
	2-7	★86-575-324-310	LEVER, CASSETTE	*	1
	2-8	★86-575-327-210	LEVER, CLOME	*	1
	2-9	★86-575-323-010	LEVER, REC B (D2)	*	1
	2-10	★80-ZM6-254-210	GEAR REEL ASSY L		2
	2-11	★86-535-293-010	C-SPRING, REEL TABLE		2
	2-12	★86-524-218-319	STOPPER, S REEL TABLE		1
	2-13	★86-535-215-410	SLIDE PLATE ASSY		1
	2-14	★86-535-285-110	E-SPRING, SLIDE		1
	2-15	★86-575-226-010	E-SPRING, HEAD CHASSIS	*	1
	2-16	86-575-411-110	HOLDER, HOUSING(WX828)	*	1
	2-16	★86-575-398-010	HEAD, HOUSING ASSY 2(WX929)	*	1
	2-17	★86-575-305-010	PLATE, HOUSING(WX828)	*	1
	2-17	★86-535-338-010	HEAD, MYLER(WX929)		1
	2-18	★87-073-018-010	BALL, STEEL 1.588		1
	2-19	★86-575-310-210	T-SPRING, HEAD(WX828)	*	1
	2-19	★86-575-240-010	T-SPRING, GUIDE(WX929)	*	1
	2-20	★86-575-347-110	P-SPRING, HEAD 2(WX828)	*	1
	2-20	★86-535-289-210	P-SPRING, ACTUATING(WX929)		1
	2-21	★86-541-318-110	T-SPRING, AZIMUTH(WX828)		1
	2-21	★86-575-206-010	HEAD, FR GEAR(WX929)	*	1
	2-22	★86-575-288-510	GUIDE, TAPE(WX828)	*	1
	2-22	★86-575-214-110	GUIDE, TAPE(WX929)		1
	2-23	★86-575-290-310	GEAR, SEGUMENT(WX828)	*	1
	2-23	★86-535-246-210	GEAR, SEGUMENT(WX929)		1
	2-24	★80-ZM6-229-110	T-SPRING, SEGUMENT GEAR 2(WX828)		1
	2-24	★86-575-259-110	T-SPRING, SEGUMENT GEAR(WX929)		1
	2-25	★86-575-343-110	P-SPRING, AZIMUTH 2(WX828)	*	1
	2-25	★86-524-300-110	P-SPRING, AZIMUTH(WX929)		1
	2-26	★80-ZM6-251-010	S-SCREW, AZIMUTH(WX828)		2
	2-26	★86-535-297-010	SCREW, AZIMUTH 3H(WX929)		2
	2-27	★86-575-311-410	CHASSIS, HEAD(WX828)	*	1
	2-27	★86-575-209-410	CHASSIS, HEAD ASSY(WX929)	*	1
	2-28	★86-524-233-219	STOPPER, T REEL PLATE		1
	2-29	★86-535-284-110	E-SPRING, DIRECTION LEVER		1
	2-30	★86-535-218-310	DIRECTION LEVER ASSY		1
	2-31	★86-535-282-010	T-SPRING, PLAY GEAR F		1
	2-32	★86-535-238-310	LEVER, PLAY F		1
	2-33	★82-DW1-216-010	LEVER, SLIDE(WX828 EXCEPT D2)		1
	2-33	★86-575-345-310	LEVER, SW2(WX828 D2)	*	1
	2-34	★86-575-408-010	PINCH LEVER ASSY F	*	1
	2-35	★86-575-222-110	T-SPRING, PINCH ROLLER F	*	1
	2-36	★86-575-409-010	PINCH LEVER ASSY R	*	1
	2-37	★86-575-339-010	E-SPRING, PINCH 22	*	1
	2-38	★86-575-341-110	T-SPRING, PINCH L(WX828)	*	1
	2-38	★86-575-223-110	T-SPRING, PINCH R(WX929)	*	1
	2-39	★86-575-342-010	HOLDER, WIRE 2	*	1
	2-40	★86-575-326-310	LEVER, RINK	*	1
	2-41	★86-535-252-210	LEVER, BRAKE R		1
	2-42	★86-535-251-110	LEVER, BRAKE F		1
	2-43	★86-575-416-010	T-SPRING, BRAKE F	*	1
	2-44	★86-575-417-010	T-SPRING, BRAKE RS	*	1
	2-45	★86-517-353-010	QUICK, SHEET(WX929)		1

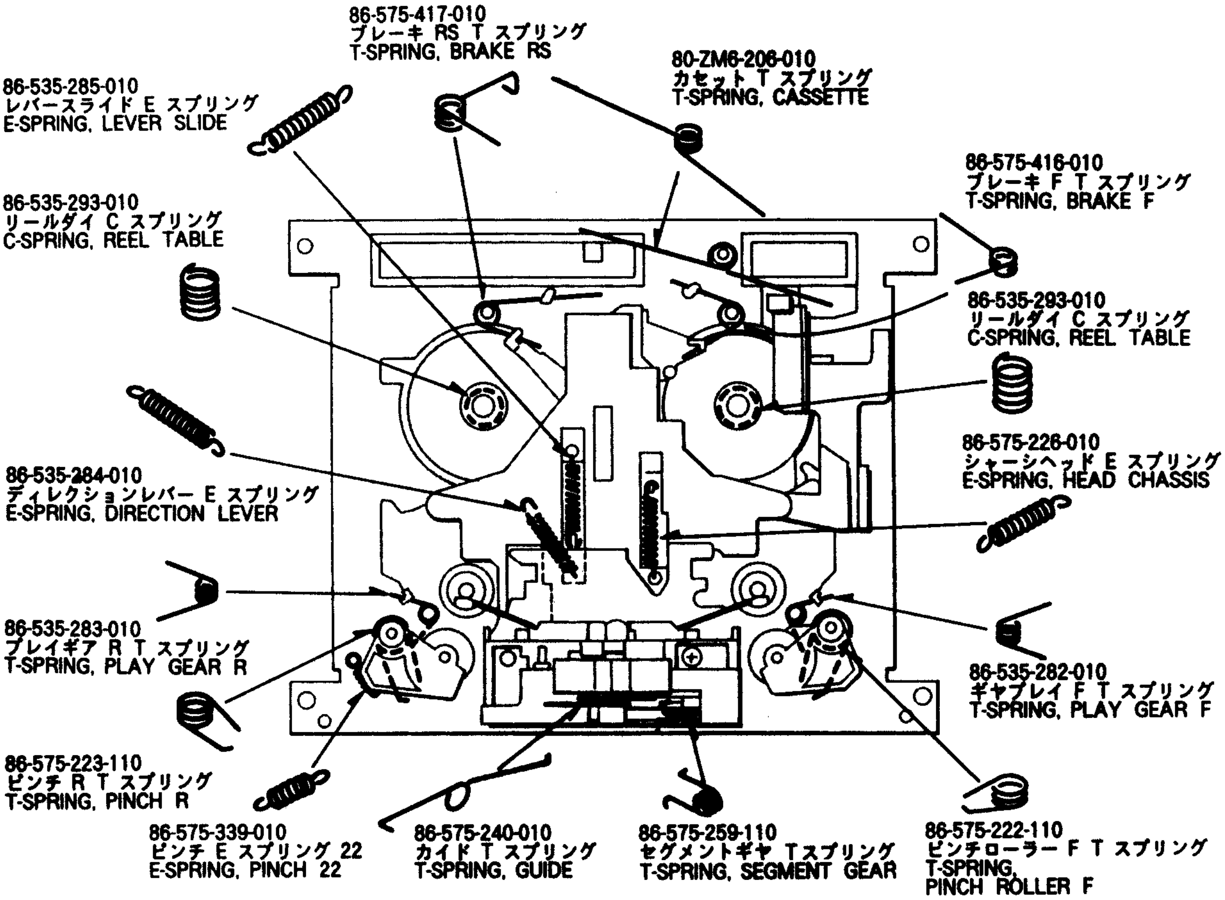
EXPLODED VIEW – 3 (AD – WX929,AD – WX828)

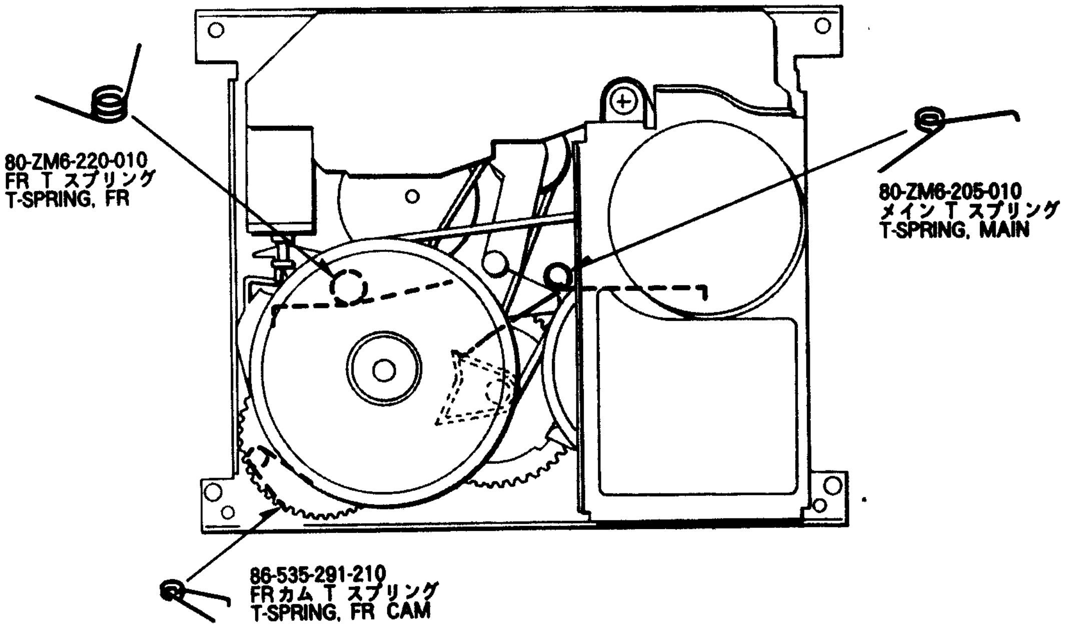
REF.NO.	PART NO.	DESCRIPTION
A	86-524-457-010	U+2.6-5.5
B	87-741-072-410	UT_2+2.6-5
C	80-ZM6-211-010	PW2.68-4.15-0.3 SLOT
D	87-081-489-010	PW1.7-3.5-0.25 SLOT
E	87-067-380-010	PW1.7-7-0.5



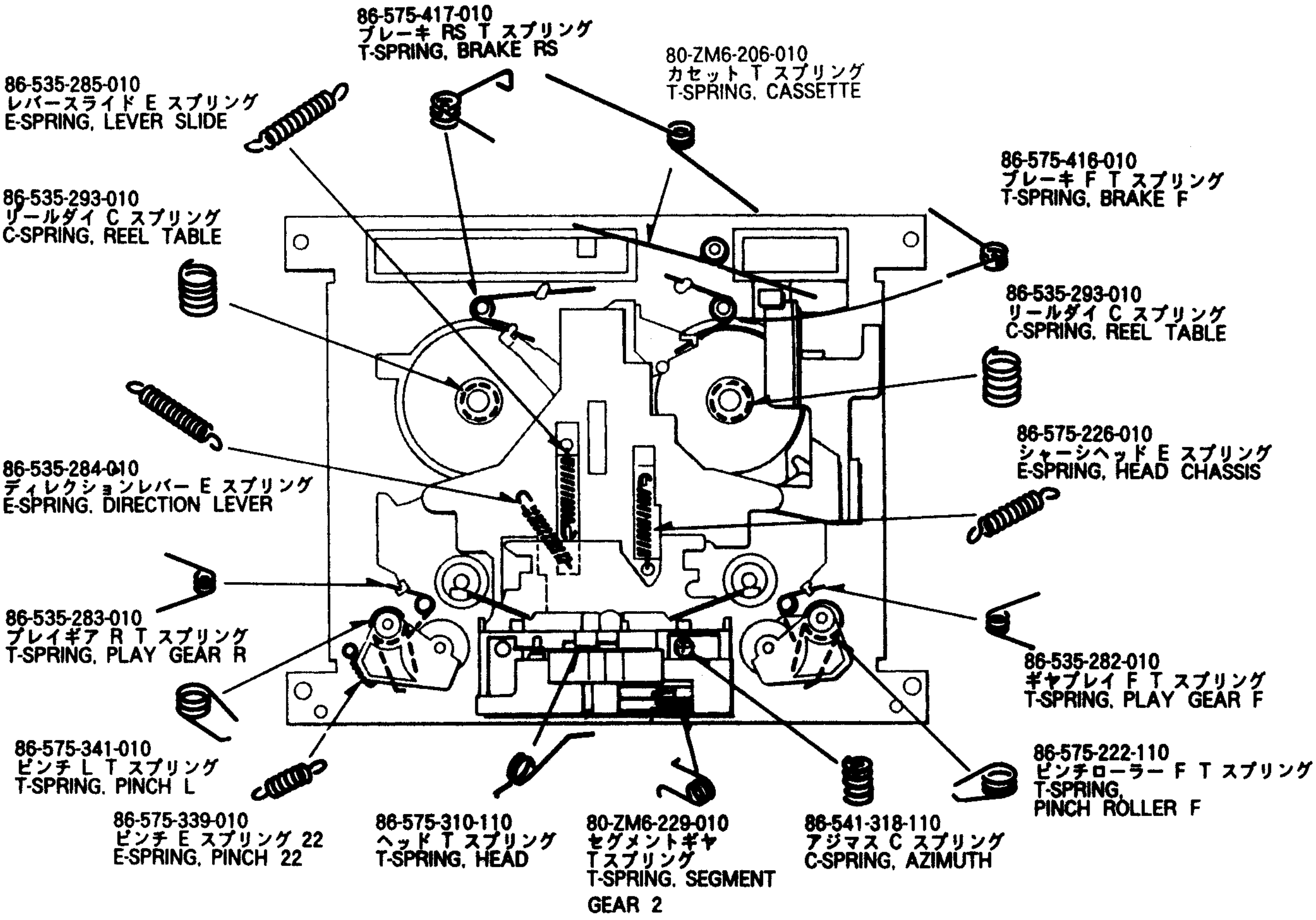
PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	QT
	3-1	★86-535-291-210	T-SPRING,FR CAM		1
	3-2	★86-575-221-210	GEAR,PLAY	*	2
	3-3	★86-535-230-510	LEVER,FR TRIGGER		1
	3-4	★80-ZM6-220-010	T-SPRING,FR 2		1
	3-5	★80-ZM6-243-010	SHEET,175-3.6-0.5		1
	3-6	★86-575-328-110	GEAR,IDLER	*	1
	3-7	★80-ZM6-217-010	RING,MAGUNET 2		1
	3-8	★80-ZM6-218-110	LEVER,FR 2		1
	3-9	★80-ZM6-222-110	SHAFT,PULLEY FR		1
	3-10	★80-ZM6-282-010	GEAR,FR 2		1
	3-11	80-ZM6-227-110	BELT,SQ 1.2-140		1
	3-12	★80-ZM6-205-110	T-SPRING,MAIN		1
	3-13	★86-535-231-510	LEVER,PLAY TRIGGER		1
	3-14	★86-575-373-010	FLYWHEEL ASSY R3	*	1
	3-15	★86-575-415-010	BELT,FLAT 0.55-217	*	2
	3-16	★86-575-375-010	FLYWHEEL ASSY L3	*	1
	3-17	★80-ZM6-242-010	SHEET,1.95-3.6-0.5		1
	3-18	★86-575-406-010	PULLEY MOTOR RQ		1
	3-19	★86-575-301-410	HOLDER,MOTOR	*	1
	3-20	★86-513-441-210	COLLAR		2
	3-21	★86-575-312-210	CAM,MAIN	*	1
	3-22	★83-575-229-210	LEVER,PAUSE B	*	1
	3-23	★80-ZM6-219-210	CAM,FR MK2 2M		1

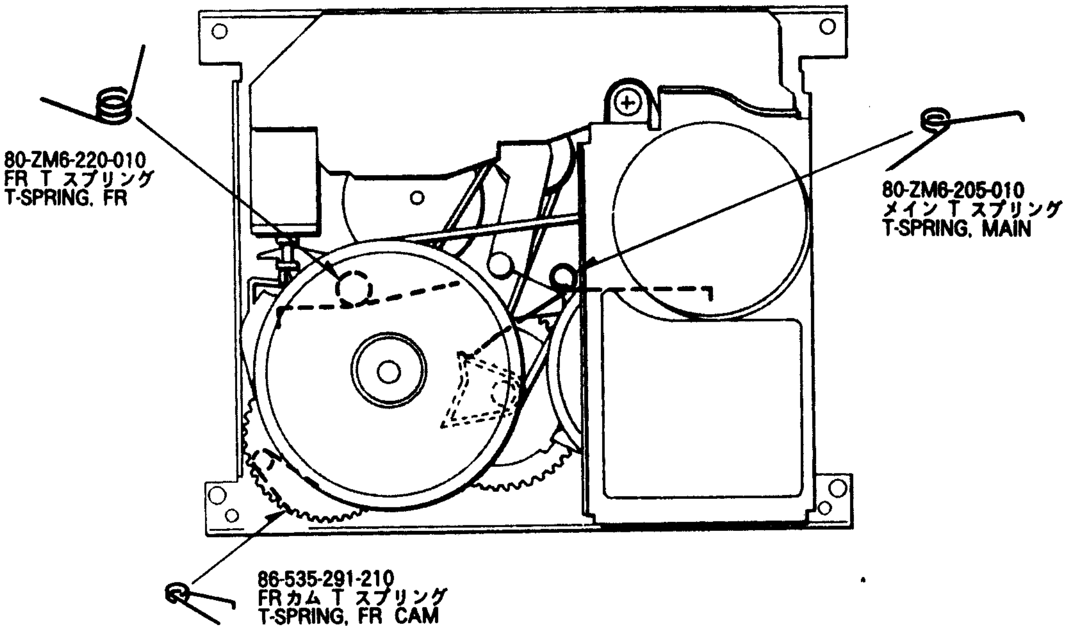
SPRING APPLICATION POSITION – 1 (AD – WX929)


86-575-417-010
ブレーキ RS T スプリング
T-SPRING, BRAKE RS
80-ZM6-206-010
カセット T スプリング
T-SPRING, CASSETTE
86-535-285-010
レバースライド E スプリング
E-SPRING, LEVER SLIDE
86-575-416-010
ブレーキ F T スプリング
T-SPRING, BRAKE F
86-535-293-010
リールダイ C スプリング
C-SPRING, REEL TABLE
86-535-293-010
リールダイ C スプリング
C-SPRING, REEL TABLE
86-575-226-010
シャーシヘッド E スプリング
E-SPRING, HEAD CHASSIS
86-535-284-010
ディレクションレバー E スプリング
E-SPRING, DIRECTION LEVER
86-535-283-010
プレイギア R T スプリング
T-SPRING, PLAY GEAR R
86-535-282-010
ギヤプレイ F T スプリング
T-SPRING, PLAY GEAR F
86-575-223-110
ピンチ R T スプリング
T-SPRING, PINCH R
86-575-339-010
ピンチ E スプリング 22
E-SPRING, PINCH 22
86-575-240-010
カイド T スプリング
T-SPRING, GUIDE
86-575-259-110
セグメントギヤ Tスプリング
T-SPRING, SEGMENT GEAR
86-575-222-110
ピンチローラー F T スプリング
T-SPRING,
PINCH ROLLER F


80-ZM6-220-010
FR T スプリング
T-SPRING, FR
80-ZM6-205-010
メイン T スプリング
T-SPRING, MAIN
86-535-291-210
FRカム T スプリング
T-SPRING, FR CAM

SPRING APPLICATION POSITION－2 (AD－WX828)


86-575-417-010
ブレーキ RS T スプリング
T-SPRING, BRAKE RS
80-ZM6-206-010
カセット T スプリング
T-SPRING, CASSETTE
86-535-285-010
レバースライド E スプリング
E-SPRING, LEVER SLIDE
86-575-416-010
ブレーキ F T スプリング
T-SPRING, BRAKE F
86-535-293-010
リールダイ C スプリング
C-SPRING, REEL TABLE
86-535-293-010
リールダイ C スプリング
C-SPRING, REEL TABLE
86-575-226-010
シャーシヘッド E スプリング
E-SPRING, HEAD CHASSIS
86-535-284-010
ディレクションレバー E スプリング
E-SPRING, DIRECTION LEVER
86-535-283-010
プレイギア R T スプリング
T-SPRING, PLAY GEAR R
86-535-282-010
ギヤプレイ F T スプリング
T-SPRING, PLAY GEAR F
86-575-341-010
ピンチ L T スプリング
T-SPRING, PINCH L
86-575-222-110
ピンチローラー F T スプリング
T-SPRING,
PINCH ROLLER F
86-575-339-010
ピンチ E スプリング 22
E-SPRING, PINCH 22
86-575-310-110
ヘッド T スプリング
T-SPRING, HEAD
80-ZM6-229-010
セグメントギヤ
Tスプリング
T-SPRING, SEGMENT
GEAR 2
86-541-318-110
アジマス C スプリング
C-SPRING, AZIMUTH


80-ZM6-220-010
FR T スプリング
T-SPRING, FR
80-ZM6-205-010
メイン T スプリング
T-SPRING, MAIN
86-535-291-210
FRカム T スプリング
T-SPRING, FR CAM

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
ECM	ECM
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
ｻｰｼﾞｻﾌﾟﾚｯｻ	SERGESUPPRESSOR
ｾﾗｺﾝ	CAP, CERA

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BAT, CONTACT ASSY	BATTERY CONTACT ASSY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CHAS, FR	CHASSIS, FRONT
CHAS, MECHA	CHASSIS, MECHANISM
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
KNOB, VOL REV	KNOB, VOLUME REV
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTORL
PANEL, FR	PANEL, FRONT
PULLY, LOAD MO	PULLY, LOADING MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP, SCREW BAT	SPECIAL SCREW BATTERY
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
SW	SWITCH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ｼﾞｸｱｰﾑ	ARM, SHAFT
ｼﾞｸｶﾞｲﾄﾞ	GUIDE, SHAFT
ｽﾄﾗｯﾌﾟ	STRAP